

The **AGRICULTURAL EDUCATION** *Magazine*



Picture legend, page 272

Featuring— The Summer Program

The Agricultural Education Magazine



A monthly magazine for teachers of agriculture. Managed by an editorial board chosen by the Agricultural Section of the American Vocational Association and published at cost by Interstate Printers and Publishers, Danville, Illinois.

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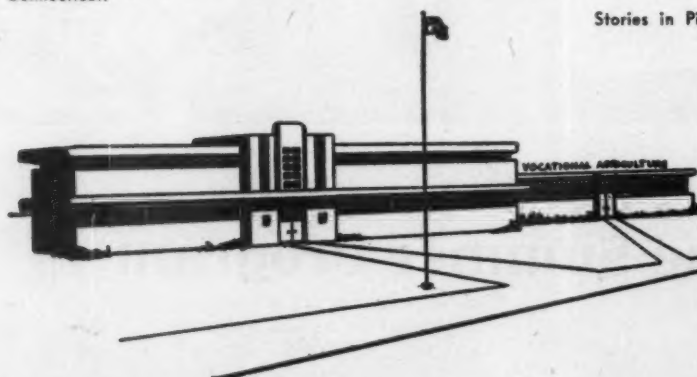
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Editorials

Guest Editorial

WARREN L. MILLER, Supervising Principal, Mansfield, Penna.

When summer comes and other teachers take long vacations, attend summer school, go on a fine trip, or get a job to supplement the family exchequer, the Vocational Agriculture teacher attends to some of the most important duties of his teaching. It is during the summer that the teacher and his boys can spend much of their time on the project program—the practical application of what has been learned in the classroom. The teacher can find the time to convince the father that his cooperation is so necessary to his son's success in school and will determine whether that son will ultimately become a farmer. There is also time for social activities and educational trips. Three months and no school, and there are so many things to be done.

Let's get going, there is no time to waste. There are several boys who need a little special help. Bill Jones' father wants him to sell his registered brood sow because he can get twice as much for her as he paid last year. You spent hours last year convincing Bill and his father that he should buy the registered sow instead of using the father's old razorback. The registered sow had ten pigs which were all sold quickly at a good price. The father's sow had five pigs which he couldn't give away. Now he wants to sell the good brood sow. There are other problems with boys and their families that need clearing up. It all takes time and patience.

Now it is time to take the boys who qualified on their annual trip. Two years ago we went to Philadelphia and visited the markets. Last year we went to the United States Department of Agriculture Experimental Farm at Beltsville, Maryland. Transportation problems, including adult drivers and planning interesting side trips and overnight lodging, take time. Then there are other duties to see about.

All the boys come in for a strawberry shortcake and a social evening. You must meet with the Corey Creek Watershed Association and discuss problems of the newly created experiment. The local Businessmen's Committee wants to meet with you to discuss a local project contest that they are sponsoring for your boys—also, it's time for the monthly meeting of your Young Farmers Group, FFA week at State College, and, at the end of the month, there is a meeting of vocational teachers at Eagles Mere. June is over and *this is vacation*.

The FFA has been asked to have a float in a local Old Hometown Parade on the Fourth of July. A number of the boys have animals entered in the contest of the Artificial Breeding Association at Tunkhannock. It's also about time to plan for a tour of calf projects, especially our Sears calves. Then there is a one-week, in-service training course at Mansfield for the Vocational Agriculture teachers of Bradford, Tioga, and Potter counties. You check projects in your spare time and try to find time to help out your Young Farmers with their special problems and attend

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Farm mechanics today

ROLAND HARRIS, Assistant Professor of Agricultural Engineering, The University of Georgia, Athens, Georgia

Should more or less emphasis be placed on farm mechanics in present-day programs of vocational agriculture? Some people say there should be "more" while others say "less," but the writer thinks that many factors must be considered before an intelligent answer to the question can be made.

Why teach farm mechanics? Just as vocational agriculture is an important part of the total educational program in a rural community, farm mechanics is an essential integral part of vocational agriculture. If and when agriculture changes, so will the program of farm mechanics in vocational agriculture.

One primary objective of farm mechanics is that of helping farm people deal intelligently with the unspecialized farm mechanics activities which they can and should perform with the tools and equipment accessible to them. This involves the development of abilities that are necessary (1) to find and interpret data for making sound decisions (intelligent choices), and (2) to develop knowledge and skills for executing these decisions. Farm mechanics is probably the largest area in vocational agriculture where decisions must be made and skills developed. Actually farm mechanics projects or jobs are involved in all farm enterprises as well as farm and home improvement work.

A recent analysis of farm mechanics projects in the major farm enterprises on Georgia farms reveals that there are over 4,000 different projects or problems that farm people can do with tools usually accessible to them. As a result of this finding, the author believes that some programs of farm mechanics are weak because neither the instructor nor the farm people in a community have recognized these problems. When they are recognized and a decision to deal with some of them is made, the emphasis on farm mechanics will greatly be increased in programs of vocational agriculture.

What is the agricultural trend in our country? Today farming is big business in capital outlay as well as in operating costs. In many states, farm buildings and equipment represent over one-half of the total farm investment, while on some individual farms this investment is as high as 75%. Farm people are constantly facing an "ever-tightening price-cost squeeze"; therefore, in order to have a decent standard of living, the farm family must increase the efficiency of their farming operations. If the farm boy or adult is able to do the unspecialized construction, repair or service jobs on the buildings and equipment, the production cost will be reduced. For example, the average yearly cost of repairs and depreciation on farm tractors varies from 5 to 17% of original cost, an average of 11%. For a farmer with two tractors costing \$2,000 each, this would amount to \$440.00 per year. With extra good care this figure could be cut in half (\$220); or with extremely poor care the figure could easily be doubled (\$880). Many professional craftsmen and technicians say that about one-half of their work

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To go or not to go on - -

Summer FFA trips

EDWIN THORESON, Vo-Ag Instructor, Estherville, Iowa



Edwin Thoreson

WITH the increasing popularity of summer FFA trips comes an increasing number of questions and problems. "To go or not to go," becomes the problem.

The case against extensive summer trips might include:

1. Boys are taken away from home when their supervised farming programs require attention.
2. The instructor is taken away from his work at a strategic time of year.
3. There are certain dangers and risks involved in taking a group of boys away from home for several days at a time.
4. Some boys cannot go along on the trips and feel left out.
5. The public may get the mistaken idea that the FFA is a travel organization.

The case for extensive summer trips might include:

1. Summer trips create interest in earning money for the Chapter.
2. Trips can be very educational.
3. Boys learn to work and live together.
4. Contagious enthusiasm created through summer trips can bring in new members.
5. Boys learn to plan together and share responsibility.
6. Some boys learn a great deal about planning and cooking meals.

Our Estherville Chapter has practically established a tradition of taking a summer trip each summer immediately after the close of school in the spring. Through the past several years we have developed a set of principles to guide us in planning these trips:

1. All in-school members may go along unless there is some special reason for leaving them at home.
2. Trips begin immediately after the close of school in the spring.
3. Trips are longer and shorter in alternate years; the shorter trips may be up to 1,400 miles in length and the longer ones up to twice that length.
4. Boys pay two dollars from their own pockets for each dollar taken from the FFA treasury.
5. On the trip noon meals usually consist of a variety of sandwiches with something to drink.
6. Morning and evening meals are cooked by the boys.
7. Two boys serve during the trip as cooks. KP's are recruited daily.
8. Two of the older boys serve as a loading committee for the duration of the trip.

9. The rear seats of the bus are removed for carrying luggage of all kinds.
10. Tents and rented cabins are used for shelter. The trend is toward tents only.
11. The bus is completely loaded the night before the trip to permit early morning departure.
12. In the event of an especially large group going on a trip a pick-up truck is used to carry most of the luggage.

Over the years the Chapter has acquired a small amount of camping equipment such as plastic drinking glasses, tin plates, cereal dishes, serving bowls, one camp stove, and one old tent that will hold eight single cots.

Flexibility in Itinerary

A somewhat flexible itinerary is prepared by a committee in advance. The purpose of flexibility is to permit the group to spend extra time where they find things of special interest. At the same time flexibility in the schedule may permit them to hurry along if some things prove less interesting than anticipated.

The itinerary is typed and duplicated and left with the parents, who are thereby informed how they may contact the group en route. The usual plan is to prepare a list of places where the group will stop and call for mail and telegrams.

Parents are instructed to address all letters to the FFA adviser and place on the flap of the envelope the name of the person for whom the letter is intended. In this manner all of the mail comes in one name and is easily picked up from general delivery at the post offices. Boys are encouraged to write home daily.

Before leaving on the trip each member must turn in his signed permission and responsibility slip, which was prepared in part by a local attorney at the request of the board of education. This is the way it reads:

"PERMISSION AND RESPONSIBILITY SLIP"

"Since it is impossible for any one person to watch every move made by each boy on a camping trip, it would be unfair to expect any one person to be totally responsible for everything that might happen."

"Therefore, before any boy be permitted to make the trip to..... it will be necessary for him to bring the following signed release from home."

"We parents hereby give our permission to..... to go on the FFA trip to....., and we will accept all responsibility for anything that might happen to him. We endorse all the rules given below and also pledge his complete obedience to his FFA adviser,..... and his full cooperation to the best interest of the group."

"We parents of said minor do hereby expressly stipulate and agree in consideration of permitting the said minor to go on said trip and to indemnify and forever hold harmless the Estherville School District, its board of directors, The Future Farmer Chapter, the bus driver, the faculty supervisor against loss from any claims, demands, or actions that may be hereafter or at any time be made or brought against the said parties by the said minor or by anyone on behalf of said minor on account of any damages or injuries sustained in any manner on said trip."

Signed by both parents individually

"The following rules are to be observed in order to have the best possible trip in every sense of the word:

1. No loudness while in towns, cities, or in camp.
2. No drinking of alcoholic beverages or beer at any time.
3. No smoking by any of the boys on any part of the trip and no tobacco in any form in the possession of any of the boys.
4. No fireworks of any kind in the possession of anyone on any part of the trip unless one day be designated for fireworks, in which case all fireworks must be disposed of at the designated time.
5. No leaving the group without permission of the adviser or the person temporarily in charge.
6. No shirking of jobs assigned.
7. No staying out or keeping others awake beyond the set deadline at night.
8. Complete and cheerful obedience to FFA adviser and others in authority without any form of grumbling, griping, or back-talk.
9. No heckling or antagonizing that would make for disharmony in the group.
10. An absolute minimum of dirty stories and immoral jokes or remarks.

"I have read the above rules and agree to observe them."

Signed by member.

"Note: Anyone who might become incorrigible or fails to be reasonably well-behaved will be sent home by bus or train at his own expense."

Attached to the permission slip and itinerary is a prepared list of items to be furnished and a suggested list of personal items the boys may wish to take along.

Insurance and Accounts

Regarding insurance it has become an established policy to carry at least \$500 medical coverage per passenger with the bus insurance. In addition we carry health and accident insurance for each member of the party.

Part of the money for the trip is carried in the form of cash, but most of it is in the form of traveler's checks.

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Use flannel boards for planning buildings

FLANNEL cut-outs are a very effective means of planning school buildings. Their use applies particularly well in designing floor plans and layout for Vocational Agriculture shops. The particular advantage of using these materials for planning buildings lies in the ease with which different arrangements can be tried. In planning buildings on paper, one often discards promising possibilities because of the time required to do the drawing, measure out the scale, and evaluate the features it affords. Once one has prepared the basic shapes and models of tools and projects, the design of a new layout becomes a matter of minutes. As worthwhile as flannel cut-outs are for planning buildings, they are even more worthwhile for demonstrating to other people the advantages and disadvantages of a particular floor plan. Features of access and convenience may be hard to describe. School administrators, members of school boards, and architects can see in a few minutes such features of a floor plan when they are demonstrated with flannel cut-outs.

To begin planning for a new building, one should determine the space requirements. Many states have these already listed in bulletins or suggested plans. For convenience in planning and in presentation, these space requirements should be boiled down to a very brief summary. Such a summary of requirements is shown in the charts in the accompanying photographs. The material on these charts is condensed from the space requirements stated in the Washington State Bulletin "Planned Housing for Vocational Agriculture." Features of arrangement and orientation may be included in the summary. This is important because total space is perhaps of less importance than the orientation of the various spaces to each other and the access that the arrangement affords.

[illegible]

should be prepared from flannel. These may be edged with photographic slide binding tape. Different colored tape may be used to denote different areas. Scale plans of shop projects and shop equipment can be made, using construction paper on a flannel back. A scale of $\frac{1}{4}$ inch to the foot seems to work satisfactorily, although a larger scale might show some details more easily. A scale of less than $\frac{1}{4}$ inch to the foot is difficult to work with because of the small size of such scale items as work benches and power tools.

For lay out planning work and for live demonstrations, a flannel covered back board works best. The accompanying photographs are taken against a background of burlap in order to provide contrast for the pictures. Pictures one to five show the Washington State small basic floor plan. What does not show from the accompanying photographs is the flexibility of this plan. The class room, office, and storage room unit is 40 feet square. Used with a 40-foot wide shop, it can adjoin the shop equally well on either side or either end to accommodate the requirements of almost any local site. With either end or side arrangements, the same features of

[illegible]

Pictures four and five show two different tool arrangements in the shop. With flannel-backed scale models of tools and work benches, many possibilities of different tool arrangements can be explored and visualized in a surprisingly short time. This phase of pre-

(Continued on page 270)

A black and white photograph of a cluttered desk. On the left, a rotary telephone is visible. Next to it is a typewriter. In the center, there's a calculator and some papers. To the right, there are several folders and more papers, some of which are labeled with names like 'G. B. B.' and 'J. B. B.'. The desk appears to be in a professional or administrative setting.

[illegible]

#7—Showing addition of a third classroom to the plan shown in #6. Notice that features of access, storage and office have been included.

As you plan your summer program, take - -

The Ag teacher's third degree

GEORGE PRICE, JR., Vo-Ag Instructor, Jacksonville, Vermont



George Price, Jr.

MY name is George Price. I'm a teacher. I just look for the facts; that's all, the facts!

On-farm instruction or farm visits for adult farmers, young farmers, or students (I use that term loosely) in the all-day classes are very similar. Where they do differ will be pointed out below. For simplicity, let's lump on-farm instruction and farm visits under one heading of farm visits. First of all, ask yourself the following questions. While doing so, think of a few farm visits you have made recently. Write your answer in the space provided. Score yourself. Use these questions, plus others, for evaluating your next visits.

Answer Yes or No

- _____ 1. Is this boy's supervised farming program or the farmer's program improving from my visits here?
- _____ 2. Are my relationships with boy's parents or farmer's family improving?
- _____ 3. Have improved practices been used as a result of these visits?
- _____ 4. Are visits "timely" as to critical periods of the program?
- _____ 5. Is the boy or farmer trying to improve farming activities?
- _____ 6. Is the farmer or boy becoming more enthusiastic?
- _____ 7. Do you have the feeling of having honestly accomplished something after your visits?
- _____ 8. Did you have a purpose besides filling up page two on the "you-know-what"?

Scoring

If you answered yes seven times, smile, turn the page rapidly and go on to the next article.

If you answered yes five or six times, turn the page slowly, letting your eyes drift over this page.

If you answered yes three or four times—Hmmmmmm.

If you answered yes one or two times—What did you say your occupation was?

These questions alone give plenty of food for thought. Well, let's hit a few of the topics that may arise when "Farm Visits" are mentioned. When a fellow puts on his boots, gathers up his hunting paraphernalia, plus his rabbit dogs, what is his intended purpose? Right! The next time you head out on a farm visit, ask yourself that same question. Thinking back over recent visits you will be

able to think of personal examples for the following notes on farm visits.

What to Do

On the visit make certain things part of the immediate purpose such as: Improving the Boy's SFP or the Farmer's Farming Activities. Notice what the boy or farmer has to work with. Make it a point to get to know the boy's parents or the farmer's family (improved relationships). Praise where and when praise is deserved. Build up interest.

Try to work with the boy, assisting him in jobs that the parents think are too big for the boy to do. Be sure the boy does show his talents. Show the parents that their son is learning to do those important jobs left for Dad to do. Pick out class jobs that are common to all the group.

When a purpose is established, make your visit. For example, "my hens are down in production about 50%." You happen to have some time after school that night so you say you will go up and look over the situation. John jumps in your car after school and on the way up he explains the facts to you. You now have a purpose—now stick to it. Get down to business soon after arrival.

Make Arrangements

I find it better to let the farmer or boy know that I am coming. It gives them time to organize questions, etc. Just dropping in with "I just thought I'd stop a minute to see how things are going" may bring the impression of "Is he riding around because he hasn't anything else to do?"

Use farm visits to follow up on class jobs. Remember the saying "without practice, there is no learning"? Make frequent visits but not so frequent as to be ineffective. Visit during critical periods—use this time to work with the slow pupil, the advanced pupil, or the pupil with the "different" project.

Keep good records on visits to enable you to stop and think what was discussed at the last visit, promises made, or what to look for in the way of accomplishments. Think over the foregoing points the next time you make a farm visit and give them what they want! □

Wanted!

Does anyone have a copy of the December, 1929, issue of the Magazine with which he would be willing to part? This is issue number 12 of Volume 1.

George W. Wieggers, Jr., of the Department of Agricultural Education, University of Tennessee, desires to complete a set of Volumes of the Magazine and needs this issue to do so. Your correspondence should be directed to Dr. Wieggers if you can be of help to him.

Use Flannel Boards - - -

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liminary planning is particularly valuable for locating power outlets for the large machinery and welders.

Pictures six and seven show the final stages of developing an expensible building which may be constructed in stages such as may be required by some of our rapidly growing union high school districts. We have found the use of flannel cut-outs to be the most successful means of planning buildings, as well as convincing school administrators of the need for adequate and well organized space. It has also proved an excellent device for teaching the principles of building planning to Agricultural Education trainees. □

Summer FFA Trips

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Either the FFA adviser or a designated treasurer for the trip pays the bills and keeps a complete accounting of the money spent. As a rule the boys are asked to pay enough money before the trip to completely cover the most common emergencies. Usually they get a most welcome refund at the end of the trip. Money for the trip treasury covers such items as transportation, food, lodging, and insurance. The boys have their own spending money in addition.

Some of the boys carry their own cameras for picture-taking, but in addition in recent years we have taken quite a number of colored shots for slides. Some years some boys take 8 mm. movies of the trip.

Reporting Trips

About a month after the trip is completed the boys and their parents and the general public are invited to the school auditorium for a showing and explaining of the pictures. These pictures are again shown at the parent-son banquet, which is usually held during National FFA Week.

Most of the boys who take these trips remember them as outstanding events of their lives. Many parents express themselves very favorably in regard to such trips.

In response to the question, "To go or not to go," our FFA members would ring out with an enthusiastic and perhaps unanimous, "Let's go!" □

Guest Editorial

(Continued from page 267)

their monthly meeting. July is over and the wife is beginning to be pointed in her remarks about that vacation.

Just before school opens in September, there is a local fair and the project books and projects must be checked to see that all is ready. The orchard, which the boys are working, needs some supervised work.

This is Thursday, and you take off for that vacation in Canada Friday afternoon or evening, or Saturday morning. If you get back Wednesday night there will be time to make a last check of the projects before the fair.

(Editor's note) Mr. Miller is not a Vo-Ag teacher but has been associated with rural education and Vo-Ag teachers for over thirty years. □



E. M. Caldwell, South Salem, Ohio, shows his modern Farm Shop exhibit to a small visitor. In addition to the modern shop, Caldwell exhibited farm shops of 100 years and 25 years ago.



Paul Schlotterbeck, Vo-Ag instructor of Hamler, Ohio, was the winner in the Home Shop class exhibit in the Ohio State Fair. This was one of several classes available.

Improving fair exhibits in farm mechanics

PAUL F. PULSE, District Supervisor, Ohio



Paul F. Pulse

PRESIDENT McKinley, during his last speech at the Buffalo exposition, uttered these words. "Expositions are the time keepers of progress; they record the world's advancement. Every exposition, great or small, has helped to some onward step. A comparison of ideas is always educational and as such, instruct the brain and hand of man."

Now is the time to consult premium lists of your county and state fairs to see if the Farm Mechanics Division is properly organized to achieve the objectives of providing a "Show Window for



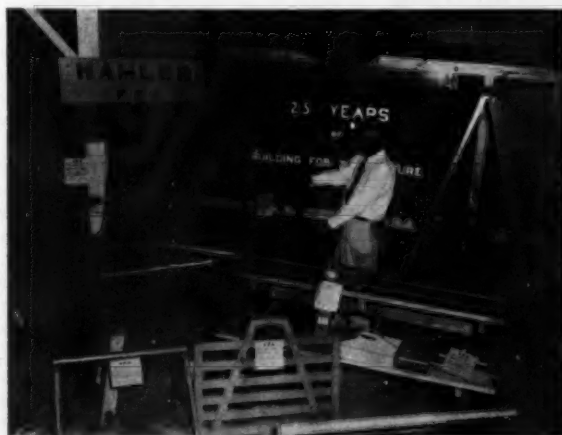
The sweepstakes winner in the 1954 Farm Shop Division of the Ohio State Fair was Paul Sonnenburg.

the work of our Vocational Agriculture classes in this area." If they do not measure up, why not have a committee of teachers meet with the proper representatives and propose the needed adjustments to achieve the objectives?

The next step should be an outline prepared by the teacher and members of the class of the proposed exhibits. Plans of construction for the various articles may then be studied and after a decision is arrived at, the construction actually begun.

Experienced teachers indicate that their students construct the articles for the exhibit with much more care and concern than when the jobs are just for home use. These articles can then be stored for the exhibit and not used previous to exhibition. This method naturally provides higher quality workmanship and improved appearance of the articles for the exhibit.

In most fairs, classes are set up for individuals as well as for groups of students who construct pieces which show under a class heading for the School Farm Mechanics and Home Farm Mechanics shop exhibits. With the many possibilities of projects in the various phases of our Farm Mechanics instruction, we certainly are overlooking an excellent opportunity in Public Relations if we do not prepare exhibits in this area. □



Prof. A. C. Kennedy, a veteran in Farm shop instruction at Ohio State University, evaluates an exhibit in the school shop class at the Ohio State Fair. Such exhibits stimulate quality of workmanship and attract favorable attention.



The various phases of the exhibit made by the FFA Chapters of Franklin County, Ohio, are pointed out by Paul Pulse, Dist. Supv., to W. G. Weiler, State Supervisor in Ohio. This exhibit featured Farm Machinery repair.

Use summer activities to help in deciding - -

To have or not to have
a young farmer program

HAROLD R. CUSHMAN, Teacher Education, University of Vermont



Harold R. Cushman

NOW is the time to decide whether or not you will have a young farmer program during the school year 1955-56. Why so soon? Because having a young farmer program is like having a new baby in the family. It affects your whole life. The same as with

the baby there are certain preparations that need to be made before you bring him home to live with you—if you treasure your quiet and peace of mind. Let's look now at some of the factors you should consider in deciding whether or not you are going to have a young farmer program next year.

Time

The first question you should attempt to answer is "Do I have the time?" or better yet, "Where can I find the time?"

Let's deal with time during the daylight hours first. Would it be possible to rearrange your teaching schedule so that responsibility for non-vocational courses, pre-vocational courses, and study halls would be eliminated? Could you curtail your participation in the co-curricular program without serious effects? Have you discussed these points with your school administrators? Would it be possible to cut down the time you are spending on items of school routine such as janitor work, school repairs, driving the school bus, detention room, home room, remaining in room for a specific period of time after school, etc.? And perhaps most important of all, have you explained to the principal how important it is to have your free periods scheduled at the end of the school day where you can use them for on-farm instruction with young farmers? How about Saturday mornings and summer? Are you presently devoting time to non-school employment which could be diverted?

Now, how about time at night? What will be your answer this year to the nominating committee for Lions, PTA, Masons, Couples Group, Grange, etc.? What do you plan to tell the Superintendent at contract time when he suggests you might coach basketball or take on additional duties of various sorts this coming year?

Please, don't misunderstand me. I'm not against any of the activities or organizations listed above, as such. My only point is that you can only be in one place at a time. If you're going to have time *next year* for a young farmer program, you've got to start arranging for it *right now*!

Know-How

Another question you should answer is "Do I have the know-how to conduct a successful young farmer program?"

Know-how, like time, takes a little doing. If you need more than you've got you'd better be making arrangements to attend summer session, to do some reading on the subject or to get help from the Agricultural Education staff members. Whether you need a little help or a lot, the time to make arrangements for getting it is *now*—not the night before a meeting.

Prospective Enrollees

The third question you should answer is "Do I have enough interested young farmers in the patronage area to start a young farmer program?"

The only satisfactory way to answer this question that I know of is to make up a list of young farmers in the area using your contacts with men like yourself who have a good knowledge of local people. Once you have such a list, take off down the road some Saturday and start explaining the young farmer program to these men. After you've made 20 or 30 such calls you'll have a good idea of the number of prospective enrollees.

Pupil Load

Closely related to time is the question "Will my pupil load next year permit me to conduct a young farmer program?"

To answer this one, determine the standards you will use next year to measure prospective enrollees in your all-day classes. Are you planning to require every boy to have a creditable farming program? Are you planning to rule out those who lack genuine interest? Should you discuss this problem with your school administrators?

If you discover that your all-day enrollment will exceed the 40-50 mark you should probably give up the idea of conducting the young farmer program yourself, and look into the possibility of hiring an assistant. Two of these men are at work in Vermont now at Bradford and North Troy. Additional funds will be available next year to hire more of these men. The early birds are likely to receive special consideration.

The following standards and policies apply to assistant instructors in Vermont:

1. The assistant instructor will work under the direction of, and with the assistance of, the teacher of vocational agriculture in the department where the course is being offered.
2. The assistant teacher shall meet the requirements specified in the State Plan for qualification as a special

teacher for young and adult farmer classes.

3. The school will be reimbursed semi-annually for 100% of the salary paid the assistant instructor for the following:
 - a. \$3.00 per hour for actual group instruction
 - b. \$1.50 per hour for on-farm instruction. Maximum—\$1,000 per class per year
 - c. \$100 annually for recruitment and administration
4. The school will be reimbursed for 75% of the travel costs involved in giving on-farm instruction. This to be at the rate of seven cents per mile reported monthly by the assistant instructor and approved by the State Supervisor.
5. The teacher of vocational agriculture will be entitled to a payment of \$100 annually for initial recruitment and for supervision and administration of the young farmer program locally.
6. The maximum total cost for salaries in a local young farmer program shall be \$1,200.
7. The same minimum standards apply to a young farmer program conducted by an assistant instructor as to one conducted by a vocational agriculture teacher. □

The Cover Picture

"Oh Oh!", says Neal Andrew, teacher of agriculture at New Boston High School, New Boston, New Hampshire, to Future Farmer Clifton Wilson as they review Clifton's weekly egg sales slip from the N. H. Egg Co-op, "70% production, with 90% of all eggs grading large and extra large shows good management!"

Clifton's present farming program consists of 900 laying white leghorn hens, two dairy cows, one heifer calf (Guernsey), and general crop work on the 150 acre Hill Top Farm. A sophomore in Vo-Ag, he is expanding his poultry business as rapidly as possible under the supervision of his FFA Chapter Advisor, Mr. Andrew. His goal is enough laying hens to pay off the farm indebtedness and provide a good living for himself, his mother, a sister and two nephews. The farm is a joint enterprise between Clifton, his mother and sister.

Summertime on-farm instruction by Mr. Andrew with Clifton during June, July and August will consist of such jobs as feeding and management in growing his replacement laying flock, pasturing and supplemental feeding his dairy calf, calfhood vaccination for Bangs disease, feeding his mature cows on pasture for milk production, housing pullets, cutting and storing roughage, preparing poultry houses for fall pullets, marketing eggs and milk, analyzing records, and securing money for financing his farm business.

Picture furnished by Earl H. Little, Director, Agricultural Education, New Hampshire.

Pennsylvania studies the problem of Multiple teacher organization in vocational agriculture departments

MARTIN B. YARNALL, Vo-Ag Instructor, Kutztown, Pa. and
GLENN Z. STEVENS, Teacher Education, Pennsylvania
State University



Martin B. Yarnall

THE number of schools in Pennsylvania employing more than one teacher of vocational agriculture has increased from thirty-two to forty-six in the past two years. The major areas in a thesis study of the thirty-two multiple teacher departments in operation in 1952-53 were (1) School and community factors in establishment and organization, (2) Instructional program relationships, and (3) Professional status of the teachers.

Included in the design of this first phase of a continuing analysis of the organizational, instructional, and profes-

sional areas of multiple teacher department development was a parallel group of thirty-two single teacher schools. They were judged by the county supervisors to be the departments which, at the time, most needed additional teachers of vocational agriculture.

School and Community Factors

A majority of the multiple teacher departments were in high schools having an enrollment of over 400 students, while most of the single teacher departments were in schools having enrollments under 300 students. The mean number of high school boys in vocational agriculture in the multiple teacher departments was 69, compared to 51 students in the single teacher departments. There was no significant relationship between total school enrollments and numbers of boys in the vocational agriculture classes.

Seventy-eight per cent of the multiple teacher departments had achieved that status within the past eight years. In order of frequency, the main reasons for the addition of a second teacher were:

1. High school enrollment of over 50 boys in vocational agriculture
2. Broad high school student farming programs
3. Broad FFA Chapter programs of work

4. Community educational needs recognized by the teacher
5. Community responsibilities expected of the teacher

Ninety per cent of the single teacher departments indicated that a second teacher was needed primarily in order that the out-of-school young and adult farmer phase of the program might be initiated or strengthened.

The activities of multiple teacher departments were, for the most part, shared by the teachers. Twenty-four different plans of dividing the in-school teaching load were reported by the thirty-two departments, indicating that great flexibility is required to meet varying local situations. In general, the second teachers taught more than half of the farm mechanics. Most multiple teacher departments had four high school sections averaging 15 boys per class.



Glenn Z. Stevens

Most single teacher departments had three sections averaging 17 students.

Seven methods of dividing the in-school student farming program instruction were in use:

1. Teacher visits the students whom he instructs in class
2. Teachers visits all students on a rotational basis
3. Teacher visits students in his classes plus enough more boys to evenly divide the enrollment.
4. Teacher visits students selected according to farm location making travel most economical
5. Teachers divide student visitation load equally at random
6. Teachers take alternate classes, visiting the same students through the four years
7. One teacher does all of the on-farm visitation

Fifty per cent of the multiple teacher departments and seventeen per cent of the single teacher departments had school time allotted to student farming program visitation.



On-farm instruction is increased in multiple teacher departments and aids in development of comprehensive farming programs by more high school students.

The multiple teacher departments were better equipped with storage space, laboratory facilities, and classroom area. Very few had more than one classroom, but eleven of the departments had a conference-office room. Only four of the single teacher departments had this important facility.

There was no significant difference between the two types of departments in
(Continued on page 277)



A young farmer summer recreation trip may involve both instructors.



More multiple teacher departments conduct adult farmer classes.

Summer activities should include assisting your boys in -

Establishment in farming through long-time planning

How will you guide them?

WM. PAUL GRAY, Teacher Education, Colorado A. & M. College



Wm. Paul Gray

THE main purpose of vocational agriculture in high school is to help the student become established satisfactorily in farming, and to teach and develop the necessary skills and knowledge that will result in greater proficiency in farming. A student cannot become

established in farming by improper planning and/or "projecting around."

Two cousins enrolled in vocational agriculture in high school. Let's call one of these boys John. The nature of John's supervised farming program is illustrated on the right. Can you note any evidence of a constructive, well planned farming program that will offer advancement in the FFA and assist John to become established in farming?

John was "projecting around" from one farm enterprise to another through his entire training period. Each year found him little better off than he had been the year before. His last project was a kind that would compel him to sell out completely when the product was ready for the market. The real estate value of his home farm was not increased very much by the kind and number of improvement projects he undertook. Wouldn't you agree he passed up a wonderful opportunity to learn many farming skills and receive a great deal of benefit through his supplementary farm skills and farm shop work? John made little progress during the four years he spent in vocational agriculture, and was little better off at the end of his training period than he was at the beginning so far as getting established in farming was concerned. Instead, he was left in a most excellent position to leave the farm and take a job elsewhere. He had nothing of his own that would help "tie" him to the farm, keep up his interest in farming, or give him a start in becoming established in farming. Unfortunately, we have too many boys who are similar to John when it comes to their supervised farming programs. You might even say the projects resembled something that was done to meet a requirement rather than a program to prepare a boy for farming and help him to become established in farming. It is true such a program might offer more experience, yet it lacks the essential features of the student accumulating assets and developing increased efficiency of production, both of which are highly essential in becoming established in farming.

He listened to the counsel and guidance given to him by his teacher of vocational agriculture and his parents, both of whom were very helpful in developing his balanced farming program that resembled a "going" farm business. Study John's long time farming program and calculate his worth at the end of his training period. How much do you think his improvement projects have added to the convenience, efficiency and comforts of rural life? Bill, on the other

TABLE A

John's "Projecting Around"

PRODUCTION ENTERPRISES				
	Ag I	Ag II	Ag III	Ag IV
Sugar Beets	3/4 acre			
Corn	1 acre	1 acre		
Poultry			25 hens	
Swine				15 fat barrows
IMPROVEMENT PROJECTS				
	Repaired hen house	Rebuilt hog fence Painted woodshed	Controlled 1A weeds	Eradicated pests
SUPPLEMENTARY FARM PRACTICES				
	Treated weeds Sharpened tools	Castrated hogs Castrated sheep	Judged livestock Mixed dairy feed	Trimmed cattle hooves Showed sheep Showed grain
AGRICULTURAL MECHANICS PROJECTS				
	Built chicken feeder	Built sawhorse Made chisels for shop	Built hay rack Timed tractor engine	Built hog feeder Built hog house Painted tractor

The Long Time Farming Program

Bill, John's cousin, planned his long time farming program thoroughly. He increased the scope, quality and latitude of his farming program by reinvesting the major part of his profits and his earnings back into the farming program.

hand, has stressed a well balanced program which includes a great deal of activity, learning skills and farm shop, and as a result it is doubtful if a tractor could pull Bill from the home farm now; he has too much to hold and (Continued on page 275)

TABLE B

Bill's Long Time Farming Program

PRODUCTION ENTERPRISES				
	Ag I	Ag II	Ag III	Ag IV
Sugar Beets	3/4 Acres	2 acres 1 acre	5 acres 5 acres	10 acres 5 acres
Corn	1 acre	1 acre 2 acres	5 acres (ensilage) 2 acres	10 acres (ensilage) 5 acres
Alfalfa				
Poultry		100 Baby Chicks	25 hens 100 baby chicks	50 hens 200 chicks
Swine	1 gilt (bred)	2 gilts 1 sow and litter 8 fat barrows	3 gilts 3 sows and litters 20 fattening barrows	6 sows and litter 25 feeder pigs 20 fattening barrows
IMPROVEMENT PROJECTS				
	Repaired hen house Built mail box Built new steps for home Painted garage Cleaned up farm	Rebuilt hog fence Painted woodshed Seeded lawn and shrubs Painted farm machinery Graveled driveway Built windbreak	Controlled 1 A weeds Put new windows and door in granary Repaired farm wiring system Painted tractor Put new roof on barn Built fence around lawn	Eradicated pests Tested soil Pest control (rats) Built septic tank Put kitchen sink and bath in home Dairy herd improvement by use of artificial insemination
SUPPLEMENTARY FARM PRACTICES				
	Treated seed Sharpened tools Dehorned calves (15) Tested milk	Castrated calves (20) Castrated sheep (100) Sprayed fruit trees Tagged ewes	Mixed dairy feed Docked lambs Wormed sheep Mixed concrete	Trimmed cattle feet Showed sheep Showed grain Vaccinated sheep
AGRICULTURAL MECHANICS PROJECTS				
	Built chicken feeder Built tool box Built 20 foot ladder Soldered milk can	Built sawhorse Made chisels for shop Built farrowing house Built rack for oil drums Hardsurfaced cultivator attachments	Timed tractor engine Built feed bunk Built automatic watering trough Surveyed for ditch Built square chute Built welding table	Built hog feeder Painted tractor Built grain trailer Built grain elevator Built truck rake for tractor

anchor him there. His future there is too bright.

Factors for Selection

There are a number of factors a student should consider in selecting the activities for his long time supervised farming program:

1. Personal preference—which projects are most appealing to the student?
2. Home farm conditions—what machinery, equipment, land, etc. are available?
3. Community situation—does the preferred enterprise fit into the local type of farming?
4. Experience and ability of the student.
5. Capital outlay for each enterprise.
6. Labor requirements—will the student be able to do all labor; is hired labor available?
7. Are there available markets for the different enterprises?
8. Management possibilities—will the student assume the entire management of the farming program?
9. Ownership possibilities—will the student have full ownership?
10. Terms or contracts—can the student make proper financial arrangements?
11. Profit expectancy—will the enterprises make a profit? Will there be immediate returns on investments or will it be a long time return?
12. What are the possibilities for accumulation of machinery, equipment, land and capital?
13. What are the possibilities for home farm improvement?
14. What are the possibilities for developing abilities and skills in farming?
15. What are the opportunities for developing father-son partnership in the farming program?

Criteria for a Long Time Farming Program

Any long time farming program that is developed should "measure up" to the following criteria:

1. A sound plan that will lead to establishment in farming.
2. A program that will increase in size and improve each year of the training period.
3. A business arrangement with the parents that will provide a means whereby the students may participate financially and eventually assume complete management of the farming program.
4. Afford an opportunity for the student to analyze the records and to evaluate the program in order that unwise decisions and improper practices may be corrected.
5. Provide major and minor projects related to the type of farming on the home farm. Where needed, contributory enterprises should be carried to insure the success of the major and minor enterprises.
6. Provide for improvement projects that will be designed and performed to improve the appearance and real

Farm Mechanics Today

(Continued from page 267)

on farm buildings and equipment could be done by the farmer if he had some training in doing the simpler jobs.

Farms are becoming more mechanized. Thousands of new tractors, tractor-drawn equipment, and other equipment and conveniences are added to the farm each year in order to produce more products per man-hour at a lower production cost per unit. Today most farm people are not receiving the maximum rewards from such mechanization because they do not know how to use and maintain this equipment properly.

Over 90% of the farms have electrical service, but, in many instances, the application of this service is not extended beyond minimum home lighting. The training of farm people on how to utilize electricity economically and safely for family recreation, home conveniences and farm work is almost an untouched field today.

Present-day farming demands efficient farm buildings for production and storage purposes. Types of buildings, methods and materials of construction, and conveniences are definitely changing as a result of new research. People must be trained to take advantage of applicable research findings.

Some other agricultural changes that are helping the farmer to increase his margin of profits are (1) on-the-farm processing of his farm products, (2) the use of labor saving devices, and (3) supplemental irrigation for certain crops. Many farm mechanics programs have not touched these fields.

The demand of teachers of vocational agriculture for in-service training in farm mechanics is an indication that farm people are recognizing more of their farm mechanics problems and are asking for more help in solving them.

estate value of the farm, to increase the efficiency of the farm and to make the farm a better place to live.

7. Provide for supplementary farm practices that will increase the ability of the student to perform jobs efficiently on the farm.
8. Provide adequate experience in farm mechanics activities to assure success in this phase of the farming program.

Actual supervised farming programs for FFA boys can generally be obtained through cooperation with state advisers. U. S. Vocational Division Bulletin No. 254 has several excellent examples of State and American Farmers growing into farming through vocational agriculture. Each example represents steady expansion and growth in the boy's supervised farming program. It is true they represent the "ideal" and resulted in each boy receiving the American Farmer degree. Most students can travel nearly as far if they so desire. With proper guidance, counsel and assistance the average young man soon passes rather quickly over the stepping stones in establishment in farming through a well planned long time farming program. □

For example, during the summers of 1953 and 1954, the teachers in Georgia asked for and received training in Farm Tractor Maintenance, Rural Electrification, and Operation of Shop Power Tools. Other states have reported similar in-service training in these and other fields of farm mechanics. The writer sees no end to such in-service training of teachers because of the changes that have or will take place in agriculture.

In many communities, the enormous investment in shop buildings and equipment is an indication that the people need and want a good program of farm mechanics. How can an agricultural teacher justify an investment of \$10,000 in a shop building and \$8,000 in equipment and carry out a weak or "no" program in farm mechanics? The writer thinks that the agricultural teacher as well as all others must justify the expenditures of public money by the type of program he provides the people served by the school. To me, an \$18,000 investment certainly calls for a strong program of farm mechanics.

Not only does good farm mechanics work help increase the efficiency of farming, but it also permits the person to attain a self-satisfied feeling of accomplishment when a project is finished. In farm mechanics, people with practical ideas will find an outlet for their energies in creative form. To some this type of work is so interesting that it serves as recreation rather than routine work. There is probably no better means of stimulating farm and home interests and appreciations in farm boys than by a strong instructional program of farm mechanics in vocational agriculture. Such personal interests, appreciations, and satisfactions are as important factors to an educational program as the value of the finished products that people may make or repair in the shop.

When integrated in all phases of vocational agriculture, farm mechanics has great publicity value. Parents like to see projects made by their children, consequently they become interested in the total program of vocational agriculture. Likewise, most farm mechanics projects and activities are ideal for pictures, shows, and contests which help to familiarize the public with the school's agricultural program.

If the agricultural teacher is interested (1) in helping in-school and out-of-school people deal with farm problems intelligently, (2) in providing ways and means for farm people to develop into more useful citizens, (3) in utilizing available facilities and resources of the community, and (4) making the school become a center for mental and social development of the people it serves, then the program of vocational agriculture must include a strong program of farm mechanics. □

Volume 28

This issue is the 324th consecutive monthly issue of the Magazine. The July number will mark the start of Volume 28. Themes for the Volume were listed in the April issue.

A new development is underway

Education for farming serves the whole farm unit*

in Minnesota

MILO J. PETERSON, Teacher Education, University of Minnesota



Milo J. Peterson

THE newest development in education for farming in Minnesota is the Vocational Agriculture Farm Management Service. This may well prove to be a benchmark comparable to the passage of the Smith-Hughes Act and the formation of the Future

Farmers of America. This farm management service is patterned after the general procedures used in the South-eastern and Southwestern Farm Management Services of Minnesota. There are, however, certain differences in operation which give promise of greatly increased value to more farmers.

This new Vo-Ag Farm Management Service is for established farm operators. It is intended to increase the efficiency of farm operation. It is the core of the public school program of adult education in agriculture. This project was approved by the cooperating members in 1952 after six years of preliminary planning and experimentation. Included in the project are the following groups:

1. The University of Minnesota
2. The State Department of Education
3. The Vocational Agriculture Instructor's Association
4. Public schools throughout the state
5. Cooperating farmers
6. The Hill Family Foundation

The purposes of the Vo-Ag Farm Management Service are well established; it is conceived as a research and teaching venture in education for farming. It is the first bold attempt to develop a straight-forward adult education program in Agriculture with the combined resources of all the key groups working together toward a common objective. It represents an attempt to pool all available resources in a common program for maximum benefit to farm people. A major weakness in previous programs has been the lack of effective coordination between the programs of the public schools and the agricultural extension service. Both have worthy objectives, but each has sought its goal more or less independently of the other. The need for more effective use of our resources was a motivating force in the development of the Minnesota Vocational Agriculture Farm Management Service. Through this project an effort is being made to:

1. Improve the coordination of financial

*Taken from an address before the State Convention of the Minnesota Farmers Union.

- and personnel resources of those engaged in agricultural education.
2. Develop more effective communication between farm operators and sources of information; to hasten the application of research in farm management.
3. Insure more complete understanding and appreciation of the economic forces affecting farming and rural life.
4. Increase the efficiency of farm operation and raise the level of living on Minnesota farms.
5. Assist the public schools in rural communities to provide improved educational opportunity for farm people.

How the Program Operates

Here briefly, is how the program works. A farm operator enrolls in the Vo-Ag Farm Management Service through one of the agriculture teachers in his local school. The farmer agrees to keep a complete set of records on a calendar year basis in the Minnesota Farm Account Book. He pays a fee of about \$25.00 to cover partially the costs of analysis of his record at the end of the year. The teacher of agriculture helps the farm operator to get his book started and visits him periodically throughout the year to teach record keeping and advise on farm management problems as they arise during the year. Group meetings and classes are held at intervals during the year at which problems of current interest and importance to farmers in the program are discussed. At the end of the year the account books are closed and submitted to the University of Minnesota for analysis. This analysis, containing information necessary to sound farm planning, is returned to the cooperating farmer. The record insures accurate income tax reporting and provides the farmer with a complete listing of all exemptions, many of which are usually missed by farmers. It also provides a basis for participation in the Social Security program. It takes the guessing out of farming.

The Farm as a Unit

The major problem of farming is one of adjustment to changing conditions, most of them economic. It follows then, that the program should be based on management problems that are real and current to the farm family. The entire program has its origin on the farms and in the homes of cooperating farmers. It is rooted in the economics of farm management. The family farm business is the unit of study.

The school thus enters the mainstream of community life in an action program that will make a real difference in the

way people in the community live and work. The increasing mechanization and electrification of agriculture have brought with them problems of adjustment that will not, cannot, wait for solution upon the education of youth. They must be met head-on now. Education for farming such as the Vo-Ag Farm Management Service provides is essential if the lag is to be overcome. This is the kind of self-help, long range, grassroots program that must accompany any government program to avoid complete frustration and loss of ability to make decisions. In spite of the fact that there are fewer farmers today than ten years ago, the economic stake of the nation in agriculture has steadily risen.

Political and Economic Policies

Government has entered into the business of farming in one way or another on every farm in Minnesota. Government programs affecting agriculture should be made and developed as part of a complete policy of international relations. It is essential that farm operators understand their role and the implications of government programs. Farm people need to be able to make decisions based on more complete information about their own farm businesses than is now the case. National averages and state figures are large and overall estimates; what the farm operator must know to make intelligent plans are the exact figures for his own farm business.

Farm prices react more quickly and violently to changes in the economic conditions of the world than do most other prices. A farm operator needs to understand, not only what happens and why, but also what adjustments he can make on his farm to temper the effects or, in some cases, how he can take advantage of them. Even the sacred cow of parity cannot be very meaningful to a farm operator unless he has the necessary information to apply it to his own business. As farming becomes more competitive, as it surely will, the importance of constant study and an annual farm business analysis assumes increasing significance.

The economic need and the need for increased participation in self-government are not easily separated. Both are involved in the Vo-Ag Farm Management Service. It is obvious, however, that if self-government is to be a reality, the ability to make decisions on the basis of enlightened self-interest is a necessity. Surely it is in the best tradition of this country for a group of farmers working together through their local public school to seek the answers to their own farm management problems. The mere fact that we have not used our public schools for this purpose before is no argument for continuing to bypass this most important resource. The dead hand of tradition and the drag of inertia are contributing factors to unnecessary dependence on government for the solution of our problems. Until and unless we do our very best to solve our own problems and work out our own salvation, we are in poor position to petition help from others. It is also true

(Continued on page 277)

that the position of supplicant carries with it certain disadvantages that farmers have historically disdained in the United States.

Whose Responsibility

It may not be inappropriate here to raise the question as to who has responsibility for education for farming. Is it primarily the duty of the University of Minnesota, the State Department of Education, or the U. S. Office of Education? If I may be permitted to answer my own question the answer would not put the first responsibility on any of these. It has been said that people get the kind of education they deserve, want, and are willing to pay for. It is a function of our society to put final responsibility for progress on the individual citizen. In agricultural education this points at School Boards as the most important policy-making body. In the final analysis it is the folks, who operate the family farms of Minnesota, who must determine what kind of education-for-farming they want.

I come with no ringing appeal for a particular line of action. There is no challenge to "storm the citadel" of reaction or to defend the bastions of "social welfare" in this presentation. On the contrary, I would request a reasoned decision as to the kind of education farm people are entitled to from their own community public school. If you believe with me that public schools must serve all the people in the community, surely you will endorse the Vocational Agriculture Farm Management Service as a legitimate function and responsibility of the community schools of Minnesota. This is a cooperative effort between the farm people in a public school district, the state government, and the national level of government. It has its beginnings on the family farms and around the dining room conference tables of farm families. Farm people will have the kind of education-for-farming they are willing to fight for and vote tax money for. In the final solution of our farm problems there is no substitute for education. All other measures are either stop-gaps or companion programs. But we can be sure that the American farmer will stand or fall in the measure to which he is willing to study, analyze, and evaluate his own problems. In this process a program such as the Vocational Agriculture Farm Management Service is an indispensable ingredient.

Place of the Public School

If a school does not have such a program, ask why. If a school does not have a sufficient staff in vocational agriculture to provide this service, find out what's holding up the employment of enough men to do the job. You may be sure that you will find the department of Agricultural Education at University Farm ready and willing to help in any way we can. We believe in this program because, to borrow from the FFA creed, we believe in the future of farming with a faith born, not of words, but of deeds. We believe that to live and work on a good farm is pleasant as well as challenging, for we know the joys and discomforts of

Multiple Teacher - - -

(Continued from page 273)

the number of community organizations in which the teacher actively participated. The average teacher took part in three to four of forty-two organizations named by the ninety-seven teachers. When classified into five types, the frequency of community organization activity, in order, was: (1) Community service, (2) Religious, (3) Agricultural, (4) Social, and (5) Public school education-fostering activities.

Instructional Program Relationships

Forty-six per cent of the high school students in the multiple teacher departments had both livestock and crop enterprises in their farming programs. Thirty-seven per cent of the students in the single teacher departments had farming programs which met this criterion, indicative of a balanced learning situation. The number of farming program visits per teacher per year was 140 in the multiple teacher departments and 268 in the single teacher departments. The mean number of instructional visits per boy was 4.3 in the multiple teacher schools and 5.2 where single teachers were employed.

Ninety per cent of the multiple teacher departments and sixty-eight per cent of the single teacher schools supplemented the home farming program ex-

farm life and bear an inborn fondness for farming which, even in hours of discouragement, we cannot deny. We believe in leadership from ourselves and respect from others (and here I speak as a farmer). We believe in our own ability to work efficiently and think clearly, with all the knowledge and skill we can secure. We believe in the ability of organized farmers to serve the public interest and our own merit in marketing the products of our toil. It is our belief that we can safeguard these rights against policies and practices that are unfair. We believe in less dependence on begging and more power in bargaining; in our own ability to work out our own salvation. We believe in the life abundant and enough honest wealth to make it so—for others as well as for ourselves; in less need for government charity and more of it when needed; in being happy, healthy and four-square as personal responsibilities. We believe that rural America can and will hold true to the best traditions in our national heritage and that farm people can and will stay with the task until our tour of duty is done.

This is in the nature of a statement of a creed that will guide our efforts in the days ahead as we work for the improvement of educational opportunities for farm people. In summary, we believe that our local public schools are the channel through which all educational resources can and should be coordinated. We do not believe that other agencies, public or private, can replace the public school in the community as the hub of educational activity.

periences by the use of group projects. Forty-four per cent of the multiple teacher departments built window booths for display at fairs compared to twenty-eight per cent of the single teacher departments. The data which were obtained on several characteristics of the FFA Chapters revealed no significant differences between the two groups of departments.

Seventy-two per cent of the multiple teacher departments made instructional visits to out-of-school young farmers while only forty-four per cent of the single teacher departments were carrying on this phase of the total program. Young Farmers Associations were organized in forty-four per cent of the multiple teacher departments and in nineteen per cent of the single teacher departments.

Professional Status

The average age of the multiple teacher department head teachers was 39 years. The second teacher averaged 31 years old. The single teacher department instructor's average age was 35 years. Reported in the same order, the mean numbers of years of teaching experience were 12, 3, and 10 years. More of the multiple teacher department head teachers had earned a Master's degree. The contract salaries of the multiple teacher department head teachers averaged \$876 above their second teachers and \$264 higher than the salaries of the single teacher department men.

Conclusions and Recommendations

By the nature of the design of this study it was expected that the two groups of schools would be similar in the characteristics evidencing needs for instruction. The data reported substantiate this hypothesis. The extent to which the needs are being met varied greatly with different phases of the job. It may be concluded that the teachers presently working alone in communities where additional instructors are needed do not permit any reduction in farming program visitation or in FFA activities. There are, however, a number of desirable areas of the program which are clearly being more adequately handled when the department has more than one teacher.

A majority of the multiple teacher department organizations have been effected since 1946. Increased in-school student enrollment was the largest factor in the development of the older multiple teacher departments. The need for expanding the young and adult farmer phases of instruction is the strongest incentive today.

Greater consideration needs to be given to the plan for division of teaching load whereby each teacher instructs alternate grades and works with the same students in both farm mechanics and the classroom during all four years of high school. School time should be allotted for FFA meetings and for farming program visitation. Each teacher should visit the students he instructs in class.

(Continued on page 284)

The experience reported here may be useful in operating your school farm

The share agreement as a means of stocking school farms

AL SHERMAN, Dir. of Vocational Agriculture, Mt. San Antonio College, California



Al Sherman

HERE in California many vocational agriculture departments in high schools and junior colleges maintain school farms as a part of the instructional program. These farms vary somewhat in size and scope as well as in their instructional use. Many of the smaller farms, and some of the larger ones, are used as laboratories where demonstration work is conducted. The school finances and owns all of the crops and livestock. Students do a large part of the work as part of the instructional program. On some of these farms the students are also allowed to keep projects of their own. The plan suggested here is concerned with a school farm of the type where the school finances and maintains the livestock.

When the Mt. San Antonio Junior College district was formed in 1946, a 450 acre site was selected for the campus. The site had been a state narcotic hospital originally, and was later used during World War II as a Naval hospital. The state had originally planned to raise some livestock on the property so had constructed a hog unit and had started construction on a slaughter house, but this was only partially completed.

When the college took over the property and the agricultural program was started, there were some 300 acres for use as a school farm, but there was no stock and few facilities. The agriculture department was just another department within the college and so it had to get by on a regular budget. Therefore, a large amount of money was not available. Some means had to be devised to get the herds and flocks started without a great capital investment at the beginning.

Just about the time the department was being started there happened to be some dry years in Northern California. We met a cattleman who was willing to put his cattle out on shares to people who had grass in other areas. We contacted this Polled Hereford Breeder and soon had arranged for a share agreement on 10 cows and 1 bull. This was later increased to about 22 cows.

The terms of the agreement stated here are quite simple, but from actual experience they turned out to be rather adequate and no great difficulties were encountered.

The college operated under this original share agreement for three years

and then both parties agreed to end it. By that time the college had established a young herd of its own and was ready to start its own breeding program.

Cattle Share Agreement

Between

____ AND ____
(School) (Cattleman)

Hereafter in this agreement _____

_____ shall be
(The Cattleman)
called the party of the first part and

_____ shall be
(The School)
called the party of the second part.

The party of the first part agrees to furnish the party of the second part with _____ Purebred cows. (Breed can be specified) and _____ Purebred bull or bulls. Such animals to be shipped to the school on _____

(date)

The party of the second part agrees to feed, house, and manage the cattle according to accepted practices. The party of the second part agrees to pay all costs of feed and management including veterinary fees.

The party of the first part agrees to furnish a new bull whenever it is deemed advisable and the bull is to be selected by the school from any that are available from the party of the first part.

Each year the calf crop will be divided in the following manner.

All calves of the current year's calf crop will be put in a corral and the party of the first part will get first pick of the calves. The party of the second part will get second pick and then alternate until calves have all been picked.

In the event of any cows which must be sent to the butcher for any reason the money is to be sent to the party of the first part. Such cows may or may not be replaced in the herd, but this is up to the mutual agreement of both parties.

All cows and bulls will remain registered in the name of the party of the first part and when the calves are selected they will be registered in the name of the party selecting them.

The terms of this agreement will cover the period from _____ to _____ and may be terminated by either party and any time with the mutual consent of the other party.

Dated this _____ day of _____ 195 _____

Signed:

(Representative of the school)

(Cattleman)

About the only difficulty encountered in the agreement was in the calf registration. Naturally all calves did not come at the same time and could not always be picked at the same time. As a result, some of them were older when registered and it cost a little more for registration. Since the school and the cattleman were not in the same locality it took quite a bit of correspondence to keep all of the records up to date. We are very fortunate, however, in dealing with a very friendly and cooperative cattleman. I believe that certain caution should be taken before entering an agreement of this type to be sure you have this kind of individual.

Since this first original share agreement on the cattle, we have entered into similar agreements for Arabian horses, Suffolk sheep, and Hampshire sheep. Also this year we started another share agreement on Polled Hereford cattle with a cattleman in our local school district.

We have found the share agreement a very suitable means for obtaining livestock for our school farm. It has involved little capital outlay and less ex-

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The FFA Chapter of San Luis Obispo, California has its own farm equipment cooperative. Members rent or lease land in nearby areas then rent equipment from the FFA cooperative to farm the land. Pictured is a Vo-Ag II class on a field trip observing and assisting a member bale his hay crop. Funds to purchase the first equipment, when the Chapter was relatively new, were advanced by the school board; however, the mortgage was soon paid off by the Chapter money raised by various activities such as concessions at football games, farming some land as a cooperative enterprise and custom work with the equipment. The management of the cooperative is handled by the Farm Equipment Cooperative committee of the Chapter with of course the advice of the Chapter adviser.



The principal and superintendent, standing, are conferring with the teachers of vocational agriculture and home economics. Such cooperation adds to the pleasant side of the teaching profession.



Carefully selected apprentice teachers need to be given the opportunity to acquire skills of the profession. Use of the opaque projector is one example.

What's wrong with teaching?*

WILLARD H. WOLF, Teacher Education, Ohio State University

PART II*



Willard H. Wolf

IN the last issue of *The Agricultural Education Magazine* some facts were presented concerning relationships between selected factors of home and family background and tenure in teaching. In this presentation additional information is reviewed to give some direction in answering the perplexing question, "What's wrong with teaching?"

Occupational Experience

The number of years devoted to teaching vocational agriculture by all graduates was 2,847 of a potential 6,798.

*Based upon dissertation, Willard H. Wolf, *The Influence of Selected Factors Upon the Vocational Choice of Graduates Majoring in Agricultural Education During the Years 1929-1948*, The Ohio State University, 1952.

(1) Part I appeared in the May issue.

The mean number of years devoted to teaching was 12.3 for present teachers, 5.3 for former teachers, and 7.3 for the combined groups. On the average, present teachers occupied 2.5 positions and former teachers occupied 1.6 positions during their teaching tenure. The number of years devoted to each teaching position was 5 for present teachers and 2.9 for former teachers. Considering all occupations, teaching and non-teaching, the average number of positions for the groups was: Present Teachers, 3; Former Teachers, 2.8; and Non-Teachers, 2.2. There was no evidence that graduates who did not teach or who quit teaching lacked vocational stability.

Eighty-eight per cent of the graduates who were not teaching vocational agriculture were engaged in occupations classified either as educational or agricultural. The occupations most frequently reported were: farming, administration and business positions, trades and industries, agricultural extension, soil conservation, agricultural

representatives in business, and teaching veterans.

Income of Graduates

The yearly salary increase in teaching ranged from \$101 to \$200. Occupations other than teaching provided annual salary increases approximating \$250. The average salary increase from one position of teaching to another was about \$300. Those who changed teaching positions received about \$100 more each year than those who remained in the same position.

Those in occupations other than teaching received about \$300 more in salary when changing positions. Teachers moving to occupations other than teaching received increases of approximately \$250, or slightly less than the increases received between positions of teaching. Thirty-seven per cent of those teachers who left for other work did so without receiving an immediate increase in salary. A number actually received less immediate income than they did while teaching.

Sixty-nine per cent of those currently teaching and 46 per cent of the former teachers earned supplemental income while teaching. The median amount of such income fell within the range of "some to one-fourth" of the basic salary received from teaching.

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Keep the personnel in the profession growing through a cooperatively planned in-service improvement program. These teachers are studying cooperative marketing in northwestern Ohio.



A recruitment luncheon is effective. These two high school seniors are learning about opportunities in Agricultural Education from the Dean of the School of Education.

Research throws some light on - - -

Present problems in educational television

CHARLES E. KING, Graduate Student, Michigan State College



Charles E. King

A mass of writings and opinions have been expressed by educators and specialists in the fields of communications concerning the use of educational television. Perhaps, you have raised certain questions when talking to others or, at least, have mentally

given thought to certain questions. What does research show about educational television? What progress is being made in the use of this medium? What are some of the special characteristics and the advantages and disadvantages? How much emphasis should your department give to educational programs by television? What can one "realistically expect" from educational television? It is the purpose of the writer to attempt to answer in part some of these questions.

What is Educational Television?

Wigren (16) stated that the term "educational television program" can refer to any program which brings about a desirable change in one's behavior and which the individual can use for his own betterment. While the program does not have to be originated by an educational institution or group, the chances are greater that it will be educational if planned by educators who "have an understanding of the principles of human growth and development, the needs and interests of learners, the needs and purposes of society, and the ways in which learning takes place. When programs are so planned, they can justifiably be called *planned learning situations on television*, or *educational television programs*." In its simplest form an educational television program is one whose purpose is to inform or instruct.

Wigren further stated ten specifications or qualifications that an educational telecast should meet:

1. It should have an educational purpose.
2. It should provide for presenting ideas and concepts in sequence from week to week.
3. It should present an educational philosophy consistent with democratic values.
4. It should build on the needs and problems of the viewers.
5. It should be a means of growth and development for the viewer.
6. It should involve the viewer as a participant.
7. It should be designed for a par-

ticular group of viewers rather than for general audiences.

8. It should at all times maintain a devotion to truth.
9. It should be flexible in its design, approach, and method of presentation.
10. It should be "natural," not necessarily ornate or polished in its presentation.

Types of Research

While some research has been completed on the types of programs offered and the viewing habits of the television audiences, very little experimental research has been accomplished concerning the educational uses and evaluation of this medium. The studies that have been reported may be grouped into five categories:

1. A comparison of the television medium with other methods for training large numbers of the Armed Services personnel (11), (14), (15). These studies are the most formal with controlled variables that have been reported.
2. Three doctoral dissertations by Hard (3), McKune (8), and Wigren (17).
3. The use of television for the dissemination of information to a mass audience by the Extension Service (9), (18), (19).
4. Telecourses presented by Western Reserve University (10), and the University of Houston (2).
5. The actual use of television by schools where the assumption seems to have been made that it was effective and the studies were concerned with ways of using it more effectively, for example, Kansas Medical School (1), Seattle (7), Philadelphia (12) Public Schools, and the New Jersey Teachers College at Montclair (4).

In the opinion of the writer the research seems to have certain weaknesses, such as failure to use control groups; lack of information concerning the quality of instructors, whether or not visual aids were used, and the teaching methods; failure to equate the groups used for comparison; and briefly reporting results in such a manner that the effectiveness of the televised programs cannot be determined.

Present Status of Development

Much study has been undertaken by educators in developing a workable plan for the use of educational television. Presently the Federal Communications Commission has reserved 251 channels for educational television. At the time of this writing eleven stations of this type are now in operation, and eight others are expected to start operations

by this summer. In addition ten stations plan to start telecasting in the near future and twenty-seven cities have initiated some type of preliminary planning.

The next two year period is a critical one during which time the fate of educational television can be determined more definitely. Many technical problems are faced. The commercial industry has not developed ultra-high frequency (UHF) equipment and receivers to the degree of perfection of the very-high frequency (VHF) receivers. Much of the personnel and funds of the industry are now being used for research on the development of color television. The U. S. Senate has held hearings recently on certain alleged "monopolistic" tendencies of the industry operating VHF Stations. Because of the lower quality reception on many sets receiving broadcasts from UHF Stations and the unavailability of the more popular television programs, people are very slow in converting their sets in a predominant VHF station area to receive the UHF channels.

Further problems exist, in that people are not viewing educational programs to the degree that was anticipated by educators during the time that they were active in getting educational channels reserved. In some situations the program format used and the quality of the production and programming have not been of the desired quality. Perhaps, the lack of qualified and trained personnel of both the technical staff and the talent used on the programs accounts for the type of programming presented by educational stations. The cost of getting a television station on the air and operating it annually is so high that many administrators consider the expense to be prohibitive or, at least, necessitating a careful study before starting actual construction of a station.

Most educators now realize that many statements made about educational television were too ideological and optimistic. In the opinion of the writer the three major problems, which include the more detailed problems listed above, are the cost, effective production and programming techniques, and the small numbers of viewers. Very little can be done about the cost, at least at the present time, but something can be done about the other problems. These recommendations seem desirable and necessary:

1. A research program to determine what educational programs people want.
2. Promotional activities to inform people concerning the availability of various programs.
3. A follow-up of certain programs with printed materials and organization of personnel to work with the viewers.
4. More experimentation to develop a format that will be less pedantic and pedagogical. It should be pointed out that progress has been made in the type of format used for programming.
5. Better selection of persons presenting programs and a training pro-

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gram for them in effective techniques before the camera.

Progress seems to have been made in the use of television programs. In some situations teachers first made use of television by discussing with their pupils the program that they had viewed discriminately outside of the classroom. Later, teachers and pupils planned a viewing pattern of selected programs. Perhaps the next progressive step was the planning of subject matter units to fit a series of television programs. Now progress has been made, in some situations, to the extent that selected teachers participate in the development and use of a series of televised programs which are prepared to supplement the subject matter units that have been based upon the special needs of the class members. Three major uses of television have been investigated and seem to be in evidence at the present time, namely, as a device for a mass training program, especially the Armed Forces; as an instructional aid to complement and supplement the other classroom activities; and as a medium of communications for continuing the education of people whether by general educational programs, organized group viewing, or telecourses (either with or without credit).

Advantages and Disadvantages

There are many advantages for educational television as well as some disadvantages. These *advantages* are:

1. Television can present that which, otherwise, would not be feasible or available.
2. Many people can be reached more economically with current information.
3. The novelty of the medium attracts viewers.
4. Teachers seem to exert an extra effort when using the medium.
5. Viewers psychologically desire the immediacy and intimacy which are available.
6. Television must present continuous activities as they occur. Therefore, the live presentation cannot be edited by removing or adding extraneous materials.
7. The viewer can perceive by using both the visual and aural senses.
8. Close-ups of intricate processes, objects, and details are possible.
9. Facial expression of the telecaster can be watched—which gives some insight into his thinking and reactions.
10. Concentration is focused on a specific center of interest.

Certain *disadvantages* of the medium include the following:

1. Preview is not possible.
2. The presentation cannot be stopped for questions and discussions.
3. The program must be used immediately while it is on the air unless it is kinescoped for later use.
4. The effects of certain television presentations are sometimes unpredictable and at times have a "boomerang" effect.

Much of the research on the educational uses of films seems applicable and analogous to educational television.

Schramm stated that "I think we may assume that so far as the learning process is concerned there are no essential differences between the educational sound film and educational television except those related (a) to the greater immediacy and liveness of television and its vastly greater potential audience for any one showing, (b) to the greater amount of control (repetition, timing, interrupting) which films vest in the classroom teacher."

What Can Be Realistically Expected from Educational Television?

Based upon the research referred to in the beginning of this article, Schramm made seven predictions concerning educational television which are supported by research and seem most sound to the writer:

1. It will command attention as, perhaps, no other teacher will.
2. People will learn from it.
3. People will learn not only facts but also attitudes, some motor skills, sometimes critical thinking, and problem solving.
4. "Properly used, educational TV may be expected to impart facts and demonstrate procedures at least as effectively as an average classroom teacher; perhaps, as effectively as an excellent teacher."
5. "Effective use of educational TV, however, is considerably different from effective use of commercial entertainment-centered TV, and will require different methods; basically it will require application of the principles of good teaching."
6. "The most effective use will employ TV as a part of an educational package."
7. "And as educators learn to use it, they will pass beyond the stage of photographing illustrated lectures, and master the subtle blending of the auditory with the visual communication which is the essence both of instructional films and instructional television."

Tentative Opinions

The writer has developed the following tentative opinions which are based upon a review of literature and research and upon discussions which have been carried on with persons who are somewhat experienced with the educational television medium:

1. People are viewing and will continue to view televised programs. Therefore, this medium has a very definite effect upon people. Whether the effect is good or bad will depend upon the way in which it is used.
2. Perhaps, a broader concept and meaning will need to be given to the term "educational" as applied to television than some educators have been willing to do at the present time.
3. Television is another instructional or visual aid with special characteristics and advantages. It should be recognized that television is only a *technical medium* and that the effectiveness depends upon the way

in which the programs are presented and used. As Maloney stated "what remains is the statement of an obvious and usually recognized truth about television or indeed about any of the mass media. They are, one and all, *electronic devices* designed to record, transmit, or preserve different kinds of symbols."

4. The percentage of people viewing educational television programs is less than was expected by educators during the period in which efforts were exerted in getting educational channels reserved. Because of this situation the program format and content may need to be changed from the stereotyped classroom format to one that is interesting and appealing to viewers.
5. For most effective viewing, educational television programs should be tied in with other planned activities and organized viewing groups.
6. Educational television faces a crisis in the next one to five years to maintain the gain that has been made and not succumb to commercial interest because of the cost and number of viewers to the degree that educational radio has.

Pertinent Questions

Based upon the above statements, the following questions need to be studied by general educators and by personnel in agricultural education:

1. What can be done to cause people to view educational programs?
2. What should be the content of various educational programs and who is to make the decision?
3. Should the televised programs be used for motivation, information, problem solving, summary, and/or instigating additional study and learning?
4. How can televised programs be integrated with classroom teaching and activities?
5. How can the instructor best follow-up the presentation to help students continue the learning, which was initiated in the class, out on the farm?
6. Under what circumstances is television better than some other visual aid and under what situations can it be used most effectively?
7. How often should televised programs be used?
8. What effect will televised educational programs have upon organized instructional programs for adult and young farmers?
9. Can televised programs replace the instructor, at least in part, since farmers can independently receive the programs at home?
10. How can the televised programs and their use be best evaluated?
11. How can more funds be channeled into research and evaluative uses? Schramm stated that "If 10 per cent of the rather large sums now being raised for educational television were put into research and evaluation during the first five years of educational stations, the growth of the medium through its ugly duck-

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One evidence of growth and development

Multiple teacher departments in the Central Region

H. M. HAMLIN, Teacher Education, University of Illinois



H. M. Hamlin

THERE were 97 schools in the 13 states of the Central Region which employed two or more fully approved teachers in their "regular" programs in vocational agriculture in 1952-53. These schools employed a total of 199 teachers. Five states (Illinois, Michigan, Kentucky, Minnesota, and Wisconsin) had five-sixths of these departments, 81 of the 97 in the Region. There were no multiple teacher departments in Indiana or South Dakota.

There were five teachers at Wausau, Wisconsin, three of them in the county vocational school, one in the senior high school, and one in the junior high school. There were four teachers at Austin, Minnesota. The other multiple teacher departments in the Region employed two teachers each.

Forty-three of the 97 multiple teacher departments were studied by the Committee on Local Policies and Programs of the Central Region Research Conference. A 21-page report of the study is available from the Division of Agricultural Education, College of Education, University of Illinois, Urbana, Ill. The members of the committee conducting the study, in addition to the author of this report, were G. F. Ekstrom, Missouri; Carl Lamar, Kentucky; J. B. McClelland, Iowa; D. R. Purkey, Ohio; H. P. Sweany, Michigan; W. R. Tabb, Kentucky; and Ralph J. Woodin, Ohio. The departments studied are not known to be representative of all multiple teacher departments in the Region, but they are probably not very unrepresentative. The information about these 43 departments, acquired through the study, indicates some of the possibilities of multiple teacher departments and points up problems and issues which need further study.

The Departments and the Areas They Serve

Half of the departments studied had been established in the years, 1949 to 1953. However, the multiple teacher department at Winfield, Kansas, has been in operation for 28 years. One of the teachers in this department has been employed at Winfield for 29 years and one for 28 years. Thirty-nine of the 43 departments were established as one-teacher departments; four were established as two-teacher departments. Typically, the teaching of agriculture had begun in these schools about 20 years before second teachers were added.

About 80 per cent of these schools

employed teachers of farm veterans in addition to their teachers of vocational agriculture. The median number of full-time teachers of veterans was two. Only four schools employed special, part-time teachers of other adults; no school had more than the equivalent of one half-time instructor. About a fourth of the schools were student-teaching centers.

In general, these departments served large territories. The median number of farms in the areas served was reported to be 900; the largest area included 2,820 farms. However, one department reported only 180 farms. The departments were in usually large high schools. The median high school enrollment was 535; the median enrollment in high school classes in vocational agriculture was 90.

Second teachers usually were added to care for rising enrollments in high school vocational agriculture rather than to provide for the teaching of young and adult farmers. In Wisconsin, a second teacher must be provided, if reimbursement is to be secured, when the number of boys enrolled in high school classes in vocational agriculture exceeds 60. Other reasons for adding teachers, given much less frequently, were reorganization and enlargement of school districts, increase in adult education responsibilities, the influence of the program for farm veterans, and the use of departments as student-teaching centers.

It may be significant that these departments were in schools that teach more adults than do most schools. The enrollment of adults in vocational agriculture was only 18 per cent of the total enrollment of adults in these school systems.

Department Organization and Administration

The median salary paid the teachers in these 43 multiple teacher departments in 1952-53 was \$4,875. The range in salaries was from \$2,800 to \$6,440. About 80 per cent of the teachers received travel allowances additionally; the median travel allowance was \$400.

Various kinds and degrees of organization were apparent in these departments. The most common arrangement was for joint sharing of the responsibilities of a department by the teachers in it. In nearly as many departments, there was a definite "head teacher," appointed by the school administration. In six schools there was a department chairman elected by the staff. In four schools the teachers seemed to be operating independently and reporting separately to their administrative superiors.

In 32 of the schools in which new teachers had been employed the other teacher in a department had shared in

making the appointments; in six schools they had not.

Almost all of these departments were being operated without organized board policies or anything else in writing that would indicate the functions and relationships of the departments or the individual teachers in them. There was heavy reliance upon "conferences" among those involved in the management of the departments as means of keeping them in running order, but the arrangements for conferences appeared to be typically unsystematic.

In 24 of the 43 schools there were separate classrooms for each teacher. In two schools there were separate shops.

There was great diversity of practice and general lack of agreement as to what is desirable in planning the high school courses in agriculture in multiple teacher departments. In half of the schools each teacher teaches the same courses each year, but only a fourth of the teachers thought this was a desirable arrangement. In a fourth of the schools each teacher follows one or more groups throughout their high school careers, teaching them all of the agriculture they are taught; there was little enthusiasm for extending this practice to other schools. There was a special teacher of farm mechanics, who taught no other courses in agriculture, in only three schools.

In about two-thirds of the schools the teachers share in advising the FFA Chapter. In the others one teacher only is the FFA adviser.

There was almost complete agreement that each teacher should supervise the farming programs of the boys in his high school classes. However, since each teacher usually shared in teaching each student sometime during his high school career, all teachers were commonly familiar with the farming programs of all boys and there was evidence of a good deal of cooperation among the teachers in the supervision of farming programs.

There was a considerable amount of specialization in the teaching of adults. In 23 of the 34 schools that taught young farmers in 1952-53 only one teacher taught young farmers. In 20 of the 36 schools that taught adult farmers only one teacher taught adult farmers. Three schools had teachers who spent their full time with young and adult farmers (Detroit Lakes and Sebeka, Minnesota, and the Wausau, Wisconsin, Vocational School). The opinions of the entire group of teachers were rather evenly divided regarding the advantage and the disadvantage of specialization in the teaching of adults.

There appeared to be generally rather loose handling of publicity regarding these departments. In 24 of 43 schools the teachers prepared and released their own publicity individually. In only six schools was the publicity regarding the departments approved by the school administration.

Effects of Adding Teachers

Although teachers were added in these departments primarily to care for rising

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high school enrollments in vocational agriculture, the increase in high school enrollments had been only 19 per cent, while the increase in the enrollments of adult farmers had been 82 per cent and the increase in the enrollments of young farmers had been 192 per cent since the departments had become multiple teacher departments. The increase in total enrollments in vocational agriculture per school had been 44 per cent. Thus it appears that the increase in enrollments had not been proportional to the increase in manpower, so that somewhat more thorough work with those enrolled could have been done.

One of these schools was conducting five young farmer classes and four schools were conducting four adult farmer classes each.

The schools reporting on visitation had increased the median number of visits to high school boys from three to four per year, to young farmers from one to three, and to adult farmers from one to two since increasing their staffs from one to two or three teachers. Benton Harbor, Michigan, reported that six visits per year to the members of young farmer classes were made in 1952-53 and two schools (Mattoon, Illinois, and Forest Lake, Minnesota) reported 12 visits per year to the members of adult farmer classes.

In 33 schools reporting on this point the hours of work per teacher per week had been reduced from 60 to 55 since adding a second teacher.

Since most of the departments had recently become multiple teacher departments, it is impossible to predict with assurance the prospective tenure and turnover in these departments. However, by putting together 170 years of experience in 33 departments that had been multiple teacher departments for two or more years, a predicted average tenure of 13 years per teacher has been computed, a period of service in one school considerably longer than the average period of service in single teacher departments.

The principal gains from providing multiple teacher departments, as reported by the teachers in them, have been increased attention to work with young and adult farmers, improvement and expansion of the FFA, better supervision of farming programs, the introduction or improvement of the teaching of farm mechanics, the provisions of smaller classes and more individual teaching, and more emphasis upon guidance and counseling.

The Prospects of Multiple Teacher Departments

The gains in the number of multiple teacher departments in the Central Region in recent years have been heartening. However, in 1952-53 they constituted only 3 per cent of the departments in the Region.

Their development has been retarded by the conception that teaching load is measured by the number of high school boys in classes in vocational agriculture, though these constitute only about a tenth of the potential clientele for agricultural education.

Studies in 11 scattered Illinois communities, conducted between 1951 and 1953, have shown that in these communities:

70 to 90 per cent of the farmers have never been enrolled in high school vocational agriculture.

64 to 77 per cent have never had a son enrolled in high school vocational agriculture.

65 to 90 per cent would attend classes in agriculture for adults if the subjects they want to study were offered.

72 to 98 per cent want systematic farm visitation and on-farm instruction by their teachers of vocational agriculture.

77 to 100 per cent of those who had attended at least one agricultural extension meeting during the previous year would attend adult classes.

61 to 80 per cent of those who had not attended an agricultural extension meeting during the previous year would attend adult classes.*

Farm operators are not the only group ready for more and better agricultural education. Some of the other groups, now largely unserved are: owners of farm land who do not operate their farms; young farmers; farm women and girls; workers in non-farming agricultural occupations; pupils in elementary and secondary schools who are ineligible for classes in vocational agriculture; and adults with no direct farming connections who live and work with farm people and help to shape public agricultural policies. In surveys during 1953-54 in three Illinois high schools which largely serve cities (Barrington, Marseilles, and West Chicago), it was estimated on the basis of interviews with samples of students that 544 of the 1,108 high school pupils in these schools would enroll in courses in agriculture.

It is entirely unrealistic to believe that adequate agricultural education for all who need it, want it, and would profit from it can be provided in most of our modern school districts by one teacher. It is far easier to defend the employment of two or more teachers where they are needed than to defend the withholding of agricultural education from three-fourths or more of the people who should have it, as we now commonly do.

In any case, the responsibility for withholding agricultural education from most of its proper clientele should never be allowed to be placed upon teachers, supervisors, teacher-trainers, or school administrators. Ultimately it rests upon the citizens of the school districts, the states, and the nation. It appears to be the duty of professional workers to make citizens face the facts regarding the limited extent of current agricultural education services. Once they face them, a high percentage of the citizens will want to do something about them.

It is difficult now to finance public education of any kind and particularly to finance any expansions in programs

Interest In and Need for Adult Education in Eleven Illinois Communities. Division of Agricultural Education, College of Education, University of Illinois, Urbana, Ill. 1953. 2 p. (Not all of the 11 communities reported on each of the points which have been indicated.)

What's Wrong - - -

(Continued from page 279)

Performance of Graduates

The median cumulative point hour ratio of all graduates fell within the range of 2.51 to 2.75. Slightly lower grades were received by the present teachers than by either the former or the non-teachers. The median student teaching grade for all graduates was B, or a point hour of 3.0; former teachers achieved a slender margin above the current teachers and those who never taught.

The performance of each of the graduates who taught was rated by those who had supervised their work. The average rating was "good" for the present teachers and "fair" for former teachers. Thus, those who continued were doing better work than were those who quit. Therefore, the statement often heard to the effect that "only the good teachers leave and the poor teachers remain in the profession," seems little justified.

The fact remains that 70 per cent of those who taught, discontinued in favor of another vocation after an average of five years in the work. There can be little doubt but that those who remain in the profession often question the wisdom of their choice when they see fellow workers leaving. Thus, not only may the profession suffer by the loss of competent teachers but it stands to suffer also from the effects of lowered morale brought about by unstable tenure.

Attitudes Toward the Profession

Graduates were asked to appraise 85 items characteristic of the program of vocational agriculture. They were also asked to add items considered important. An indication of the reaction to this request may be evident by the response of 937 written comments related to the 85 suggested items and 242 other comments related to items added by the respondents.

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of public education. The difficulty of raising money for public education will increase during the next ten years as a multitude of children and youth, now born but not in these schools, flock into our elementary schools and high schools.

Schools that continue to use the primitive methods of working with lay citizens that are in common use will be financially submerged. Schools that learn to work decently with the citizens whose schools they are, will raise surprisingly large amounts of money for their support. We in agricultural education know far more than most school people about working with citizens in advisory committees and otherwise. We need to learn more and to learn it rapidly. If we can get citizens to exercise intelligently the responsibility for public education in agriculture that is theirs, we can provide rather rapidly the number of multiple teacher departments needed. If we cannot, those we have may disappear along with thousands of shakily established single teacher departments. □

**Professional competence is gained on the job
as a continuous process**

Insanity vs. stupidity

ARTHUR FLOYD, Teacher Education, Tuskegee Institute



Arthur Floyd

AN exasperated, disgusted motorist, so the story goes, finally brought his automobile to a stop necessitated by a recent puncture. Finding himself at least one mile away from the nearest filling station and no help in sight, he rolled the wheel with the punctured tire to the station and back again to his disabled car. On returning to his car, he discovered with utter amazement that some one had stolen the lugbolts from the hub of the disabled wheel during his absence. There he stood helpless and bewildered. On looking around void of a way of action to get himself rolling again, he realized that he had stopped in front of an insane asylum. Peeping through the steel bars, one of the inmates was looking at the man in his consternation and finally said, "I see you had a puncture." "Yes," said the man, "And some blankety-blank rascal stole the lugbolts and left me here stranded." "Won't the car run with three lugbolts holding the wheels on?" "Yes," said the man. The inmate said, "Why don't you take one lugbolt from each of the three other wheels and put on the fourth wheel." The man gladly followed this suggestion and in a few minutes he was ready to begin rolling again. Just as he pulled off, he yelled through the bars to the inmate, "You're crazy, aint you?" "Yes," said the inmate, but I'm sure not stupid."

Are there implications in the above related incident for vocational agriculture teaching? As teachers of vocational agriculture, are we allowing ourselves to become shackled by the confines of routine methodology to the extent that we rely on canned educational pabulum received in our courses in teaching methods for giving instruction and direction to our pupils day after day, week after week, month after month? If the answer is "yes" and the best results are obtained, we can only say that those who planned and taught such courses were wiser and had a greater genius for preparing such teachers than those of today of whom we are acquainted. The educators of today, whose major efforts are to prepare teachers of vocational agriculture, will most likely agree that in addition to insisting that their pre-service teachers secure all the latest, best, and most desirable methods of teaching, those pre-service teachers also must visit homes and farms of their pupils, study and learn the individual home and farm problems of

each pupil, learn the ambitions and aspirations of each pupil resulting from constant home and farm visitation, learn the attitudes of parents toward pupils and vice versa, and learn the attitudes of parents toward the program of vocational agriculture in which their children are engaging. The knowledge gained through these and many other varied home-farm and community contacts most likely will serve as a basis for constructing and carrying on a more vigorous, needful, and vitalizing program of teaching by the agricultural teacher.

The ape locked in an iron cage starving to death when a hacksaw was in easy reach with which he could have liberated himself, is a case of plain stupidity. The animal basking near the fire in the frozen north in the dead of winter, but freezing to death for lack of forethought to reactivate the fire, shows mental dullness. It may be true that when many human individuals invade a climate of untoward emotional stress, there may be, at least temporarily, a trace of mental deficiency. But even then, as was true in the case of the inmate in the asylum, many persons are usually quick-witted in the wake of a crisis.

Is there evidence of stupidity when an agricultural teacher attempts to plan a course of instruction for his pupils without knowing intimately the home and farm situation of each pupil in his class. Does lack of knowledge of each pupil's ability to perform because of physical handicaps such as vision, hearing, adenoids, teeth, or hunger show mental dullness? Is there evidence of stupidity on the part of the teacher when he fails to investigate certain socio-psychological causes of failure by his pupils such as: discouragement of pupils by their parent or parents; the ridiculing of a pupil by other pupils; shyness on the part of the pupil; the pupil's lack of faith in his own ability; the lack of correlation between the pupil's mental and chronological ages; mental and physical fatigue, etc.?

There is evidence of stupidity in the man who made two separate trips to the mill on a mule in order to have two pecks of corn ground. On each trip he carried a pumpkin in the opposite end of the sack to balance the corn. One trip would have sufficed had he balanced the load by putting a peck of corn in both ends of the bag.

Would the teacher who fails to make use of desirable teaching facilities, other than text books and references in the agricultural library, such as project records, Chapter achievement records, experiences of pupils received on field trips and excursions, home visitations and contact with parents—would failure

Multiple Teacher - - -

(Continued from page 277)

Although multiple teacher departments tend to have broader student farming programs, to engage in a larger number of specialized activities, and to have more active young and adult farmer programs, further study is needed to determine the reasons why they may be making less on-farm visits to high school students. Because many young and adult farmer programs are only now being made a regular phase of the department effort, future studies should be directed toward determining the most effective sharing of the out-of-school teaching assignment by the instructors.

The fact that three-fourths of the schools used for student teaching in Pennsylvania in 1954 were multiple teacher departments suggests that superior teachers tend to become head teachers in multiple teacher department organizations. The definite trend toward school district reorganization into larger administrative units also means that the number of multiple teacher departments will steadily increase. More teachers will need special training for service in these school communities. □

The Share Agreement

(Continued from page 278)

pense to the school district. It also has given us a tie with the livestock industry which is not always possible from an outright purchase of livestock. The agreement shown here could be used for almost any type of livestock and could be altered slightly to fit any local situation. We have received inquiries from people in the cattle industry requesting a copy of our agreement so there are people around in the various states who are interested in this type of program. If worked properly it can be used as a good means of public relations. It gives a tie-in with the Vo-Ag program that you would not ordinarily have and creates interest in your program. □

to make use of some or all of such experiences in an effort to put over a desirable teaching program of vocational agriculture show a germ of stupidity on the teacher's part?

The teacher who makes a visit to each pupil's home, sometimes several visits to the same home when desirable and necessary, talking with each pupil's parents, learning their problems, sharing their experiences, discussing situations and conditions that relate to the job of teaching them and their children from the middle of May when the regular school closes until the middle of September when school opens again, is in all likelihood better prepared for the job ahead of him during the regular school year than he otherwise would be, not withstanding his rich courses in methods received while in college. He may well answer his critics who chide him and denounce him as being crazy for all the extra efforts put forth in preparation: "I may be crazy, but I'm sure not stupid." □



A demonstration site ready to be judged. Samples of the soil have been provided along with bottles filled with water and score cards on clip boards.



These boys are being instructed in the use of score card prior to actually judging the site. Such preliminary instruction is very essential.

A western adaptation to stimulate soils instruction - -

Land judging gets results

.. This method works!

JACK MOIR, Graduate Student, California State Polytechnic College, San Luis Obispo, California



Jack Moir

A high degree of student interest can be created through the use of a land judging activity. This interest will apply to and carry over into most phases of agriculture.

Whether a boy is interested in plants or animals, the basic ingredient of a successful farming enterprise is the land and its proper use. Land judging requires a boy to critically evaluate the land features and possibilities. He does this with the aid of a score card, variations of which are in use in most parts of the country.

The real beauty of land judging is that you need no special equipment. You need no farm to take your boys to as in judging crops or livestock, although the more real the adaptation the better. A pit can be dug anywhere, just so the different layers of the soil profile can be observed.

Score Card

A detailed land judging score card, patterned after the one used in the National Contest held in Oklahoma City, has been adapted to Far Western conditions by Dr. Logan S. Carter, Head of the Soil Science Department at the California State Polytechnic College, and his associates. He says, "This score card, together with the demonstration procedure, has brought about a very great increase in student and instructor interest in land judging and soils instruction."*

The score card has been used by the

Cal-Poly Soil Science Department to demonstrate land judging to 11 Vo-Ag departments in the Coast region of California. These demonstrations met with such an enthusiastic response that Dr. Carter was asked to put on a similar demonstration for over 50 Vo-Ag instructors at their recent South Coast Regional Meeting.

Pre-Demonstration Instruction

Before students can do an effective job of using the score card to judge land, they must have some understanding of the nature and characteristics of soils. Knowledge of the following features will provide a basis from which to start a land judging demonstration.

Color: Generally speaking, topsoil color denotes fertility; dark soils are more productive than light colored soils. Permeability of the subsoil is indicated by bright colored red, yellow or brown soil.

Depth: A deep soil is more productive than a shallow one.

Slope: Degree of slope is inversely proportional to productivity.

Texture: Varies from coarse (mostly sand) to very fine (mostly clay), medium being most desirable.

Erosion: The extent of topsoil removed by wind and water.

Demonstration Procedure

After giving the students some background instruction, the following procedure, or one similar, may be used. Choose two separate sites. Dig a pit at each site deep enough to show the layers of the soil profile. Provide samples of the topsoil and sub-soil at the edge of the pit. Have a few pop bottles filled with water handy to wet the soil for texture determination.

With the score card in hand take up, individually, each step in scoring at pit No. 1. Briefly describe the meaning of each physical feature and where to look for it. Go over the entire score card in this manner. As a finale, the farming practices which could best be employed are discussed by the instructor.

Conduct a follow-up in the classroom. Elaborate on points not fully understood by the students. Describe land management practices appearing on the score card, but not generally used in the area.

Following this, take the students to pit No. 2. Have it prepared exactly as was pit No. 1. At this site the students mark their choice on the score card without help from the instructor. When this is done, go over the score card step by step. Ask for student results. Give the official result after each step and the reasons for such a choice.

SCS Assistance

Do not fail to make use of the services and personnel of the local Soil Conservation Service. These men are well versed in the subject matter concerned and they are happy to give valuable information as to local conditions. They have access to soil survey maps of the area as well as information on farming practices and improvements.

This procedure has worked very well in the San Luis Obispo area. Participants become familiar with the score card and its terminology prior to actual usage. Motivation comes naturally because of the apparent simplicity and competitive nature of the activity. It provides the opportunity for students to ask questions; then the student is allowed to do the job on his own.

Follow-Up Is Necessary

Additional follow-up is necessary; this can be done in a variety of ways. Short field trips can be taken to judge a gulley or a road-side cut. These are ready-made, easy to find, and with a little cleaning of the weathered exterior soil, ready to judge. On rainy days, pictures illustrating the different land capability classes can be exhibited, soil profiles or soil survey maps can be studied, the

(Continued on page 287)

*Copy of the score card referred to can be obtained by writing to the author.

Professional and Teaching Aids

"A Course Outline on Agricultural Cooperatives for Teachers of Vocational Agriculture in Maine, prepared by a committee of teachers and others, working from 1946 to 1948. Revised, American Institute of Cooperation, July, 1949, Re-run, September, 1951, October, 1952. Available upon request from the American Institute of Cooperation, 16 pages.

Contents include in outline form: What are Cooperatives, History of Cooperatives, Types of Cooperatives, Principles of Successful Management for Cooperatives, Financing Cooperatives, Legal Aspects of Cooperatives, Member and Public Relations, Factors to Consider in Organizing a Cooperative, Case Studies and References.

"Soil Conservation," prepared in cooperation with the Soil Conservation Service in Maine, mimeograph, Department of Agricultural Education, University of Maine, 22 Agri. Engr. Bldg., Orono, Maine, 1950, supply limited, no charge, 11 pages.

Contains outlines for teaching: Determining the importance and need for soil conservation, Preparing and using a base map of the farm, Preparing and using a soil conservation survey map of the farm, Determining land use capabilities and Determining the conservation practices to be used.

"Forestry" mimeographed, by Wendell R. Beaney and others, Department of Agricultural Education, 22 Agricultural Engineering Building, Orono, Maine, 1952, limited supply, available on request, 19 pages.

Contains seven basic units for instruction in farm woodlot forestry for vocational agriculture, with suggested teaching aids.

"A Guide for Teachers of Vocational Agriculture in Planning and Developing Farming Programs." Philip S. Barton, Teacher Trainer, et al. Department of Agricultural Education, University of New Hampshire, Durham, New Hampshire. Limited number of copies available. January 15, 1955. 28 mimeographed sheets.

A guide for teachers of Vocational Agriculture in helping to determine purposes and values of farming programs, procedures for selecting, planning and developing, and the supervision and evaluation of Supervised Farming Programs.

"A Guide to Formulating a Program of Work for a Local Chapter of the Future Farmers of America." Earl H. Little, Director of Agricultural Education, et al. Vocational Education Division, Office of Education, State House Annex, Concord, New Hampshire. Limited number of copies. January 15, 1955. 7 mimeographed sheets.

This guide for teachers of Vocational Agriculture indicates the desirable activities helpful in developing aggressive rural leadership and the ways and means

of accomplishing these activities through the program of work.

Farm Forestry Practices for Students of Vocational Agriculture, State Department of Education, Columbia, South Carolina, 1948. Distribution probably limited. 78 pages.

Included in this bulletin are seventeen problem-based lesson plans dealing with areas such as forestry as a part of supervised farming, forestry in South Carolina and common forestry jobs. Some of the problems are related specifically to forestry in South Carolina, others, however, are applicable to a wide area of the country. Technical content is well within the ability of the average high school student.

Improving the Farm Home and Community Through Instruction in Landscaping, State Department of Education, Columbia, South Carolina, 1951. Distribution probably limited. 54 pages.

Here is a guide teachers of vocational agriculture will find useful in teaching the complete job in home beautification. The planning of landscape improvements, the establishment of shrubs and lawns and the maintenance of the home grounds are all adequately treated.

Supervised Farming Programs in Vocational Agriculture Departments, School of Education, Clemson College, South Carolina, 1953. Limited distribution. 48 pages.

Part one of this publication deals with suggestions for the organization of a course in vocational agriculture and the supervision of farming programs. The latter portion contains eleven suggested lesson plans to be used in establishing, maintaining, and evaluating supervised farming programs.

Selecting, Fitting and Showing Livestock, State Department of Education, Columbia, South Carolina, 1953. 147 pages.

The contents of this attractive bulletin have been developed around 17 major jobs in the selecting, fitting, showing and grading of beef, dairy, swine and poultry. Each job is analyzed into a number of problems the pupil will need to consider in order to do each job properly. Also included are suggested appropriate classroom and home farm activities for each job.

Present Problems - - -

(Continued from page 281)

ling years to its productive adulthood would be immensely speeded up."

In the opinion of the writer the television medium offers many educational opportunities for us who are interested in agricultural education. However, television is no panacea and there is much to be learned about its effective use and the utilization of its special and particular characteristics. The possibilities seem important enough to merit the

study and consideration of the medium by many people. The writer believes that it can be safely stated that educational television will be used for agricultural education. If that assumption is correct, are we going to wait until the pattern, activities, and use of the medium have been established by agencies and groups outside the agricultural education field or are we going to participate in the initial stages and give such leadership that the development of educational television for agricultural education will be in keeping with our philosophy of sound education?

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News and Views of the Profession

Dillon Employed by National Magazine



Jimmy Dillon

A former national president of the Future Farmers of America, Jimmy Dillon of Bonita, La., has been employed on the advertising staff of The National FUTURE FARMER Magazine at Alexandria, Virginia.

Dillon completed work for his Bachelor of Science Degree in Agricultural Education from Louisiana State University just a few days before he reported for duty at the magazine headquarters in February.

He served as national FFA president during the organization's 25th Anniversary year of 1953. Perhaps prophetically, he was elected to the office during the same week in October, 1952, that the first issue of The National FUTURE FARMER was published.

Dillon's work will be mainly in advertising sales, a field particularly suited to his background of experience in leadership and public contact.

The American Forestry Association to Make Annual Conservation Awards



The Awards Committee of The American Forestry Association is now receiving nominations for the annual Conservation Awards. Members of the Committee (reading from left to right) are: Mr. Lowell Besley, Executive Director, AFA; Honorable Watkins M. Abbitt, U. S. Representative; Dr. M. D. Mobley, Executive Secretary, American Vocational Association, Inc.; Mr. Robert N. Hoskins, Chairman, Industrial Forester, Seaboard Air Line Railroad; Mr. Bryce C. Browning, Secretary-Treasurer, Muskingum Watershed Conservancy District; Mr. Arthur R. Spillers, Chief, Div. of Cooperative Forest Management, U. S. Forest Service; Mr. Louis H. Wilson, Director of Information, American Plant Food Council.

The five awards presented by the Committee each year are given in the fields of public information, business and

industry, public servants, education, and general service. Individuals, organizations, etc. are invited to submit nominations, which must be received by June 15, 1955, at AFA headquarters, 919 Seventeenth Street, Northwest, Washington 6, D. C.

The awards presentations will be made at Jacksonville, Florida, October 5, in conjunction with the 1955 Annual Meeting of the Association in that city.

Workshop on Supervision

Plans for a Workshop on Supervision are being completed by the Ohio Teacher Training and Supervisory Staff. This will be held in Columbus June 20 to 24,

1955. Dr. A. W. Tenney is assisting with the planning and will attend the Workshop. Mr. Mark Nichols, Utah State Director of Vocational Education and Past President of the American Vocational Association, will serve as Co-Director and Consultant for the Workshop.

It will be recalled that a Minnesota Workshop was held in 1948 and the functions of supervision were emphasized. The intent during the Ohio Workshop is to pursue further a study of effective techniques and procedures in supervision; in other words, "How to Get the Job Done."

Supervisors and Teacher Trainers from other states are invited. Representatives from eight states have already indicated they plan to attend. There will be no charge and room and board will be available on the campus at a minimum cost.

What's Wrong - - -

(Continued from page 283)

Many of the favorable comments pertained to: relations with farm people, opportunity for achievement, opportunity to serve, opportunity for self-improvement, opportunity for self-direction; while many of the unfavorable comments pertained to: relations with supervisors, yearly salary, opportunity for advancement, working hours demanded, time for family life.

The features of the work that were liked best were: relations with farm people, faculty members, school administrators, students and supervisors, working outdoors, teaching farm shop, agriculture 1 and 2, and agricultural engineering, supervising farming programs, counseling with students, advising the FFA, twelve months' employment, and travel allowance.

These features of the work were liked least: yearly salary, opportunity for advancement, working hours demanded, time for family life, preparing state reports, supervising study halls, teaching farm management, and conducting adult and young farmer programs.

In general the most competent teachers evaluated the items more favorably than did the least competent teachers. Only three items were scored higher by the poorer teachers than by the better teachers. They were: teaching farm shop, teaching agricultural engineering, and planning lessons.

Current teachers, former teachers, and non-teachers alike were favorably impressed with their undergraduate course of study. They felt that the curriculum in Agricultural Education prepared them for teaching, helped them to secure employment and to perform the tasks in other occupations as well as for teaching vocational agriculture.

Some Suggestions for Alleviating Teacher Shortage

Keep salaries of teachers in line with the salaries of men in other vocations requiring similar experience and training.

Reward the better teachers by promotions to schools with higher salary schedules.

Reduce the workload of teachers of vocational agriculture.

Show that the reports expected are useful to the program.

Improve the project record book and secure acceptance and understanding of its use by teachers.

Emphasize the characteristics of the "teacher's way of life" as well as the skills needed for teaching in preparing the recruits for the profession.

Improve the rapport between teachers and supervisors and the attitude of teachers towards the profession through the program of in-service education.

Provide more help in the areas where weaknesses are reported through the program of in-service education.

Keep a cumulative record of graduates majoring in Agricultural Education and contact those graduates for suggestions to improve the profession.

Develop an effective procedure for recruitment and selection to reduce the number of failures and provide a sufficient number of qualified personnel to conduct a successful program of vocational agriculture. □

Land Judging - - -

(Continued from page 285)

students' technique in determining soil texture can be improved, etc.

Purpose

This activity involves soils, soil conservation, range management, pasture management, irrigation, fertilization, and reclamation as can be seen on the score card. Its purpose is to serve as an aid to soil science instruction for all classes of Vocational Agriculture.

It means work for the Ag teacher and work for the student. It means cooperation, and perhaps the glow of satisfaction on the face of a boy who, from his own experiences, has gained an understanding of soils as well as additional confidence in his own abilities to judge land under active farm conditions. Above all it means that a student will become aware, through a stimulating activity, of the basic concepts of soil science. □



One of the aims and purposes of the FFA is to provide and encourage the development of organized rural recreational activities. The annual FFA barn dance is one of the outstanding events of the San Luis Obispo, California Chapter. Pictured is Chapter president, Eric Lonborg dancing with Mary Ann Sylvia. With back to camera is Chapter vice-president, Bruce Wilson and his partner, Pat Hudson.

Stories in pictures



From Harold Kugler, Kansas State College, comes this picture of Farm Mechanics display at the State Fair. It is none too early to do the kind of planning necessary for such a fine display if it is to be ready for your 1955 Fair.



↑ The Highlanders are the world's most rugged breed of beef cattle. In the bleak north of Scotland they graze over rocks and rough terrain from the time they are calves until they are ready for market. Their diet is the native grasses, heather and bracken. Seldom are they brought in for supplementary feed or for shelter. A long fur-like coat of hair protects from the cold, and they actually seem to enjoy digging in the snow for a living. They often make their greatest gains in the winter. Their beef is good quality, but they require almost twice as long to mature as do Shorthorns, Herefords and Angus. Although their looks deceive them, they are comparatively gentle. A Highland cow will protect her calf, but she wastes no time producing milk for it. The young calves go to work foraging for their own living a few weeks following birth. The all-cow herd shown in the picture was on a grazing tract belonging to the University of Aberdeen.

With a humorous glint in his eye, and addressing Doctor Anderson as a visiting American, a Scottish herdsman remarked, "Highland cows are right in style, they wear the 'Mamie fringe'."

Picture taken by L. S. Anderson and made from an original Kodachrome positive by James C. Fink, Area Supervisor of Vocational Agriculture, New Castle, Pennsylvania.

↓ Vo-Ag teachers should be alert to take advantage of field demonstrations. Also, they should seek the assistance and cooperation of other professional agriculture workers in making the demonstration more effective. Mr. H. C. Finley, Vo-Ag teacher at McAdams, Mississippi, sponsors a grass-sod seeding demonstration in which all agricultural workers in the area were invited to participate. The Pet Milk Corporation cooperated in the demonstration. Such events have a place in Vo-Ag programs of work.



Activities such as the one pictured will be engaged in frequently by FFA members during the coming summer. There is a lot of work ahead for young Dan Cleveland of the Clinton, Miss., Chapter before he gets his animal ready for show. But he will have able advice from his teacher, Joe Treloar.

Some tractor! And it takes "some boy" to win the tractor rodeo at the Arizona State Fair, but Neil Richter, Amphitheater Chapter president is that kind of a boy. Tractor driving contests will occur in many states and communities during the coming summer. Picture furnished by W. F. Hendrix, Vo-Ag instructor, Tucson, Ariz.



